Oct. 16, 1956 J. J. JUNG 2,767,283

CARTRIDGE FUSE HOLDER

Filed July 5, 1955

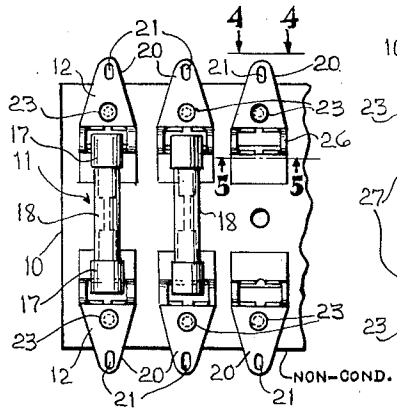

Fig. 1.

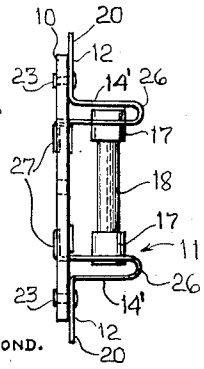

Fig. 2.

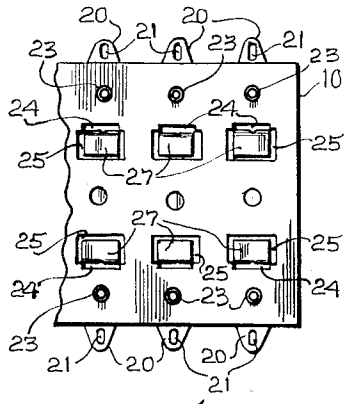

Fig. 3.

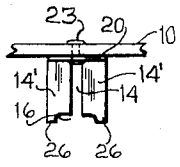

Fig. 4.

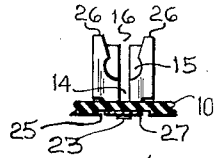

Fig. 5.

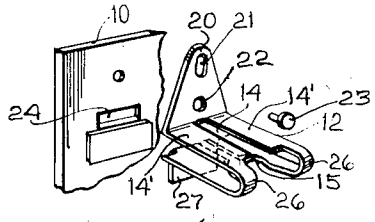

Fig. 6.

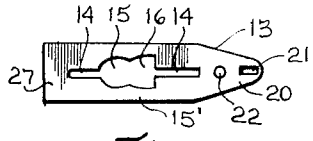

Fig. 7.

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CARTRIDGE FUSE HOLDER

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5 Claims. (Cl. 200—133)

This invention relates to certain new and useful improvements in a cartridge fuse holder.

The invention contemplates a fuse holder of the character hereinafter described in which the holder will impose upon the fuse a uniform pressure, thereby to assure proper contact between the clamps of the holder and the fuse; a fuse holder in which the clamps cannot be distorted or misshaped by the placing or removing of the fuse within and from the holder; a fuse holder which will have the maximum holding power upon the fuse; and one in which the fuse cannot be accidentally displaced endwise but must be placed within or removed from the holder by lateral movement with respect to its length.

A still further object of the invention is the provision of a fuse holder which comprises relatively few parts, one which can be manufactured at an economical cost and one which will be highly efficient in use.

Other objects will appear hereinafter.

The invention consists in the novel combination and arrangement of parts to be hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawings showing the preferred form of construction, and in which:

Fig. 1 is an elevational view of a fuse holder embodying my invention and arranged in gang formation;

Fig. 2 is a side view of the same;

Fig. 3 is an elevational view of the reverse side of the holder as shown in Fig. 1;

Fig. 4 is a fragmentary detail view taken susbtantially on line 4—4 of Fig. 1;

Fig. 5 is a fragmentary sectional detail view taken substantially on line 5—5 of Fig. 1;

Fig. 6 is a perspective view of parts of the clamp embodied in my invention showing the same in exploded relation;

Fig. 7 is a plan view of a blank from which the fuse clamp embodied in my invention is made.

It is an object of this invention, as before stated, to provide a fuse holder which will firmly hold a cartridge fuse while exerting a uniform pressure thereon. To accomplish this and other objects of the invention, my improved fuse holder includes a mounting plate **10** formed of non-conductive material, such as Bakelite or the like. On this plate may be mounted one or more fuse holders **11**.

Each fuse holder **11** comprises a pair of clamps **12**. These clamps **12** are arranged in spaced opposed relation with respect to each other. The clamps **12** are of like construction. Each is formed from a single blank **13** of conductive material. The blank is bent upon itself to provide a medial portion **15'** bifurcated as at **14** to provide a pair of spaced parallelly extending clamping fingers **26**.

At the bight portion of the medial portion **15'** there is formed an entrance opening **16** which communicates with an opening **15** of a diameter slightly less than the outside diameter of the cap **17** of a cartridge fuse **18**. This opening **15** is located, as shown in Fig. 6, beneath the upper limb portions **14'** of the medial portion.

The blank **13** has its opposite end portions bent in opposite directions and substantially at right angles with respect to the medial portion **15'** to provide a terminal attaching plate **20** and a hook plate **27**. The terminal plate **20** has an opening **21** to which the end of a wire to be soldered thereto may be projected. This terminal plate **20** provides a second opening **22** through which a rivet **23** or the like projects for connecting the clamp **12** to the mounting plate **10**.

The mounting plate **10** is provided with an elongated slot **24**. Beneath this slot **24** in the rear surface of the plate **10** is formed a shallow recess **25**. The hook plate **27** is adapted to fit into this recess **25** with its outer surface substantially flush with the back surface of the plate **10**. This is accomplished by projecting the lower portion of the medial portion of the blank **13** through the slot **24**.

The metal from which the clamp is made is preferably of spring material whereby when the cap of the fuse **18** is positioned in the opening **15** it will be yieldably held therein. By forming the clamp of yieldable material, the hook plate **27** is yieldably held in the shallow recess **25**.

When the fuse is mounted between a pair of clamps **12** in the manner shown in Fig. 2, and as herein described, it will be noted that the cap **17** of the fuse will be located between the outer limb portions **14'** of the medial portion of the blank **13**. By this arrangement the cartridge fuse cannot be accidentally moved endwise so as to become disengaged by the clamps **12**. By such arrangement the cartridge fuse can only be removed by a pulling force exerted in a direction laterally from the longitudinal axis of the cartridge.

As the diameter of the opening **15** is slightly smaller than the diameter of the fuse cap, the insertion of the cap **17** through the entrance opening **16** into the opening **15** will spread the clamping fingers **26** so as to effect a frictional engagement between the cap of the fuse and the clamping fingers **26**, thereby to assure positive contact pressure between the fingers **26** and the fuse caps.

It is desirable that this pressure between the clamping fingers **26** and the fuse caps be such that while assuring positive contact pressure between the fingers **26** and the fuse caps, the pressure will not interfere with the ready removal of the fuse from the holder.

It will be apparent that my improved fuse holder is relatively simple and may be economically manufactured.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

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

1. A cartridge fuse holder comprising a non-conductive mounting plate, a pair of clamps each formed of a single blank of conductive material bent upon itself to provide a medial horizontally extending portion bifurcated in the direction of its length to provide a pair of spaced clamping fingers for the reception of the cap of a cartridge fuse, said blank having its opposite end portions bent reversely to provide an attaching plate and an attaching hook, the attaching plate being connected to the mounting plate and serving as a terminal to which a conductor wire is to be attached, and the hook having hooked engagement with said mounting plate.

2. A cartridge fuse holder comprising a non-conductive mounting plate, a pair of clamps each formed of a single blank of conductive material bent upon itself to provide

a medial horizontally extending portion bifurcated in the direction of its length to provide a pair of spaced clamping fingers for the reception of the cap of a cartridge fuse, said blank having its opposite end portions bent reversely to provide an attaching plate and an attaching hook, the attaching plate being connected to the mounting plate and serving as a terminal to which a conductor wire is to be attached, and the hook having hooked engagement with said mounting plate, said mounting plate having an elongated slot formed therein, said hook projected through said slot with said hook yieldably bearing against the back of said mounting plate.

3. A cartridge fuse holder comprising a non-conductive mounting plate, a pair of clamps each formed of a single blank of conductive material bent upon itself to provide a medial horizontally extending portion bifurcated in the direction of its length to provide a pair of spaced clamping fingers for the reception of the cap of a cartridge fuse, said blank having its opposite end portions bent reversely to provide an attaching plate and an attaching hook, the attaching plate being connected to the mounting plate and serving as a terminal to which a conductor wire is to be attached, and the hook having hooked engagement with said mounting plate, said blank at its line of bend providing an entrance slot for said cap communicating with the bifurcation of said medial portion.

4. A cartridge fuse holder comprising a non-conductive mounting plate, a pair of clamps each formed of a single blank of conductive material bent upon itself to provide a medial horizontally extending portion bifurcated in the direction of its length to provide a pair of spaced clamping fingers for the reception of the cap of a cartridge fuse, said blank having its opposite end portions bent reversely to provide an attaching plate and an attaching hook, the attaching plate being connected to the mounting plate and serving as a terminal to which a conductor wire is to

be attached, and the hook having hooked engagement with said mounting plate, said mounting plate having an elongated slot formed therein, said hook projected through said slot with said hook yieldably bearing against the back of said mounting plate, said blank at its line of bend providing an entrance slot for said cap communicating with the bifurcation of said medial portion.

5. A cartridge fuse holder comprising a non-conductive mounting plate, a pair of clamps each formed of a single blank of conductive material bent upon itself to provide a medial horizontally extending portion bifurcated in the direction of its length to provide a pair of spaced clamping fingers for the reception of the cap of a cartridge fuse, said blank having its opposite end portions bent reversely to provide an attaching plate and an attaching hook, the attaching plate being connected to the mounting plate and serving as a terminal to which a conductor wire is to be attached, and the hook having hooked engagement with said mounting plate, said blank at its line of bend providing an entrance slot for said cap communicating with the bifurcation of said medial portion, the cap of said fuse when positioned in said entrance slot being disposed beneath the upper portion of said bifurcated portion.

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