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PACKAGE AND SUPPORTING TAG FOR FUSE PLUGS

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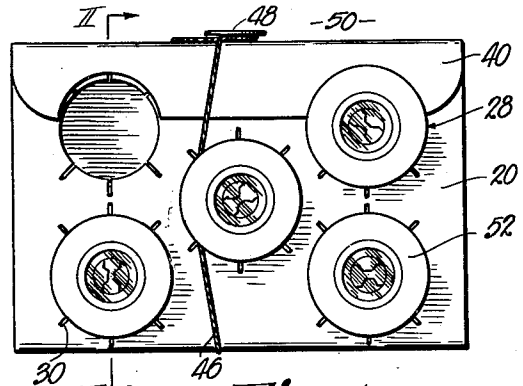


Fig. 1.

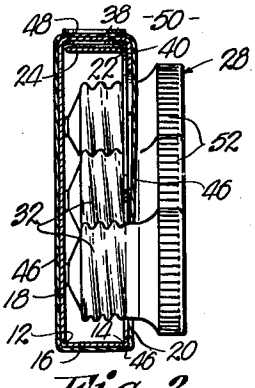


Fig. 2.

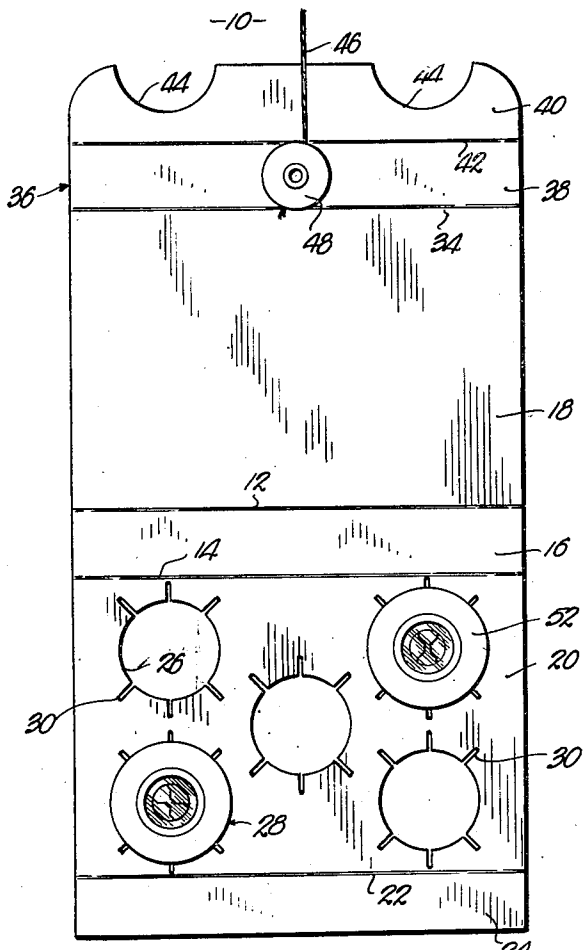


Fig. 3.

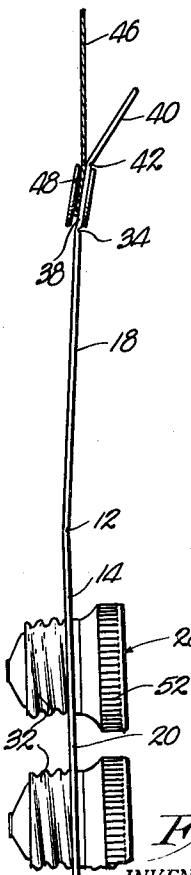


Fig. 4.

INVENTORS.
Benjamin W. Rockey
Edward L. Salmon

BY

ATTORNEY.

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PACKAGE AND SUPPORTING TAG FOR FUSE PLUGS

Benjamin W. Rockey, Overland Park, Kans., and Edward L. Salmon, Kansas City, Mo.

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1 Claim. (Cl. 206—45.19)

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This invention has to do broadly with the field of merchandising and advertising, the primary object being to provide a novel package for a plurality of separate articles of manufacture so formed as to not only hold the articles in place until such time as removal thereof is desired, but to display the individual articles themselves to the prospective customer while the package remains in a wrapped condition and to permit utilization of the package itself when open as a means for hanging the articles in a convenient location adjacent a point of use.

It is the most important object of the present invention to provide a combination package and supporting tag for electric fuses of the screw-in type commonly employed in the home, the package itself constituting an initially flat, polygonal, foldable panel having a plurality of openings in one portion thereof for frictionally receiving the fuses themselves.

Another object of the present invention is to provide a package for fuses as above set forth wherein another portion of the plate panel is foldable into overlying contacting relationship to one end of the fuses when the latter are within the openings therefor.

A further object of the present invention is to provide a flap at one end of the panel, a portion of which serves as a side wall of the package and another portion thereof constitutes a locking member engageable with certain of the fuses to prevent accidental opening of the package.

A further object of the present invention lies in the way in which a tying member is affixed to the flap of the package permitting hanging of the entire package in an open extended condition with the fuses thereof readily accessible at a fuse box where the fuses are to be used.

Other objects will be made clear or become apparent as the following specification progresses, reference being had to the accompanying drawing, wherein:

Fig. 1 is a top plan view of a package and supporting tag for fuse plugs made in accordance with our present invention.

Fig. 2 is a transverse, cross-sectional view taken on line II—II of Fig. 1 looking in the direction of the arrows.

Fig. 3 is a plan view of the panel from which the package is made showing the outermost faces of the top and bottom walls thereof; and

Fig. 4 is an edge elevational view of the panel shown in Fig. 3.

It is common knowledge that fuses for the home are commonly purchased from retailers in

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ordinary boxes with the fuses themselves either loosely disposed in the box or held in place by suitable cardboard partition structure. The house-holder usually has no convenient spot near the fuse box for placing the box of fuses until ready for use and consequently, when replacement becomes necessary, a long and aggravating search is necessary to find a new fuse. Furthermore, the boxes are not adapted to give full instructions as to use of the fuse and surprisingly enough, many home owners actually do not understand the principle of changing fuses.

As will hereinafter appear therefore, the package for screw-in type fuses forming the subject matter hereof, is adapted not only to conveniently display the fuses themselves in the retail store but is usable by opening the same into a fully extended condition as a tag to support the fuses themselves adjacent the fuse box by merely hanging the same on or near the fuse box.

In Figs. 3 and 4 of the drawing, an initially flat panel that is made from cardboard, plastic or other suitable bendable material, is broadly designated by the numeral 10. Blank or panel 10 is polygonal and in the form illustrated is elongated and therefore, rectangular.

A pair of transverse, parallel lines of fold 12 and 14 are formed in the panel 10 intermediate the ends thereof setting off an elongated strip 16 extending entirely across the panel 10 and constituting one of the side walls of the completed package as will hereinafter become more clear.

Lines of fold 12 and 14 also define one edge of a bottom wall portion 18 and a top wall portion 20 respectively. The opposite edge of top wall portion 20 is defined by a transverse line of bend 22 next adjacent the proximal end of panel 10 and parallel with the lines of fold 12 and 14.

The strip 24 between line of bend 22 and the proximal end of panel 10, comprises an inner side wall of the finished package. The top wall portion 20 is provided with a plurality of circular openings 26 for frictionally receiving screw-in type fuses 28, taking the form of that shown in Figs. 2 and 4. Since it is desired that the peripheral edge of openings 26 contact the sides of the fuse 28 to hold the same against displacement, a pair of diametrically opposed slits 30 are formed in the top wall portion 20 extending radially outwardly from each opening 26 respectively. Actually, the diameter of the opening 26 is slightly less than the full diameter of threaded portion 32 of plug 28 and consequently, as plug 28 is forced into the opening 26 as illus-

trated in Fig. 4, the material forming top wall portion 20, will give away slightly because of the slits 30 and when the fuse 28 is in place, the same will be held in place by frictional engagement by the edge of opening 26. While the openings 26 positively hold the fuses 28 in place and against accidental displacement, removal thereof is easy since an outward pull upon the fuse 28, will permit removal from opening 26 because of the fact that the material forming top wall portion 20, will yield.

A transverse line of bend 34, spaced inwardly from that end of the panel 10 opposite to the strip 24, is in parallelism with the lines of fold 12 and 14 and the line of bend 22 and the bottom wall portion 18 is defined by the space between line of fold 12 and line of bend 34. That portion of the panel 10 between line of bend 34 and the proximal end of panel 10 constitutes a flap broadly designated by the numeral 36.

Flap 36 is in turn sub-divided into an outer side wall strip 38 and a locking member 40 by a transverse line of bend 42 substantially midway between line of bend 34 and the proximal end of panel 10. The widths of the strips 24 and 38 are approximately the same. The locking member 40 of flap 36 has a pair of substantially semi-circular notches 44 formed therein and extending inwardly from the proximal end of panel 10. These notches 44 are spaced apart a distance substantially the same as the distance between the two openings 26 next adjacent the line of bend.

An elongated tying member 46 that may comprise an ordinary tying cord, has one end thereof affixed directly to the flap 36 and particularly to the outer side wall strip 38 midway between the ends of the latter by a grommet 48.

The complete package shown in Figs. 1 and 2, and broadly designated by the numeral 50, is formed in the following manner.

Fuses 28 are first placed within their respective openings 26 in top wall portion 20 of panel 10 with the threaded ends 32 thereof projecting beyond the inside face of top wall portion 20 as shown in Fig. 4. The operator thereupon bends the panel 10 on lines of fold 12 and 14 to dispose the bottom wall portion 18 of panel 10 in substantially parallel relationship to the top wall portion 10 and across the ends of the fuses 28 and adjacent threaded portions 32.

Fig. 2 of the drawing shows the way in which the innermost face of the bottom wall portion 18 contacts the proximal terminal ends of the fuses 28 when the panel 10 is bent on lines of fold 12 and 14. It is seen that the width of the side wall strip 16 is substantially the same as the distance between the terminal ends of the fuses 12 and the innermost face of top wall portion 20. The operator thereupon folds the inner side strip 24 on the line of bend 22 in the same direction as the side wall strip 16 to place strip 24 in parallelism with strip 16. Flap 36 is thereupon folded upon the line of bend 34 laterally with respect to bottom wall portion 18 and perpendicular thereto. When flap 36 is thus bent, it will overlap the inner side wall strip 24 and the strip 38 being substantially identical with the strip 24, will be in complementary juxtaposed overlapped relationship to the inner side wall strip 24.

Finally, the locking member 40 of flap 36 is folded on the line of bend 42 perpendicular to the strip 38 and in overlapping relationship with respect to a portion of the outermost face of top wall portion 20 next adjacent the line of bend 22.

It is seen that when the locking member 40 is thus bent, the semi-circular notches 44 will be in alignment with substantially half of the two openings 26 adjacent line of bend 22.

Inasmuch as the fluted head portion 52 of fuses 28 are of a greater diameter than the threaded portions 32 thereof, such head 52 will overlap the top wall portion 20 next adjacent and circumscribe the openings 26. Consequently, the locking member 40 will underlie the heads 52 of the two proximal fuses 28. These heads 52 will accordingly hold the locking member 40 against the tendency to return to the parallel condition with respect to strip 38 and also hold the locking member 40 flatly against the outermost face of the top wall portion 20. It is appreciated that the width of the locking member 40 could be increased if desired and that the notches 44 could be made substantially deeper to the end that two of the fuses 28 would hold the package 50 in the condition shown in Figs. 1 and 2. However, since it is desired that the device be used as a fuse supporting tag, tie member 46 is provided, the same being of sufficient length to extend from the grommet 48, across the top wall portion 20, as shown in Fig. 1, and thence across the outermost face of strip 16, the outermost face of bottom wall portion 18 and back to the grommet 48 for coiling thereabout. The tie member 46 and the locking member 40 therefore, cooperate in holding the package 50 in the assembled condition shown in Figs. 1 and 2.

The way in which the strips 16, 24 and 38 are made of a particular width to dispose the bottom wall portion 18 in contacting relationship with the proximal ends of fuses 28, is of extreme importance. The package therefore, becomes self-supporting and when a plurality of such packages 50 are stacked in superimposed relationship, the package 50 will not be crushed by the weight of the overlying packages. Inasmuch as the heads 52 of all of the fuses 28 are exposed to view when the package 50 is assembled, the same is easily merchandised and when placed on display, the prospective customer immediately sees the article to be purchased. This is particularly advantageous in the item herein involved because of the fact that it is desirable to attract a customer's attention to the fuses since invariably, new fuses are not on hand when needed.

After purchase of the package 50 of fuses 28, the purchaser unties the cord 46, thereby permitting the package 50 to open to the fully extended condition shown in Figs. 3 and 4. The tying member 46 provides a convenient and simple means of attaching the entire tag to a nail or the like at an easily accessible location adjacent the fuse box itself. When it becomes necessary to replace fuses, the home owner can easily and quickly pull one of the fuses 28 from its locked position within an opening 26.

It is also noted that both faces of the panel 10 are available for whatever advertising material as well as instructions that the manufacturer desires to use. As above indicated, a complete set of directions is extremely desirable and such might well be placed upon the innermost face of the panel 10 outlining exactly why fuses are needed, how to replace the same and the cautionary steps that should be taken in the replacing operation. Similarly, the outermost face of the panel 10 can be filled completely with such advertising as may be desired.

The entire item is highly desirable from the standpoint of the manufacturer as well as the retailer, because of the fact that purchasers will select the same over other packaging means for fuses not only because of the fact that the appearance thereof attracts the attention of the purchaser, but because the purchaser will soon become aware of the fact that complete directions are included and further, that the package is readily extended to a fuse-supporting tag that can be fastened at a convenient location adjacent a fuse box.

It is notable that the item is extremely inexpensive to manufacture since only the essential elements are included and inasmuch as the ends of the package **50** are open and further because of the fact that the over-all thickness of the package **50** is reduced by the particular manner of positioning fuses **28**, little material is needed.

While only one modification of our present invention has been illustrated and described, it is apparent that many changes and modifications might be made and, therefore, those that fairly come within the spirit of this invention as defined by the scope of the appended claim, are contemplated hereby.

Having thus described our invention, what we claim as new and desire to be secured by Letters Patent is:

A package comprising a box having a bottom wall portion, a top wall portion, and a pair of opposed side wall portions, there being a plurality of openings formed in said top wall portion; an electric fuse plug extending into each of said openings respectively, each plug having external threads frictionally engaging said top wall portion at the respective opening, an annular, external flange exteriorly of the box, and a metallic contact member engaging the inner face of the bottom wall portion; and a locking member on one of said side wall portions and overlapping said top wall, said locking member having a notch formed therein for receiving a proximal plug between the flange thereof and the top wall.

BENJAMIN W. ROCKEY.
EDWARD L. SALMON.

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