May 12, 1942. H. J. FEY 2,283,001

PACKAGE

Filed Jan. 27, 1940

Fig. 1

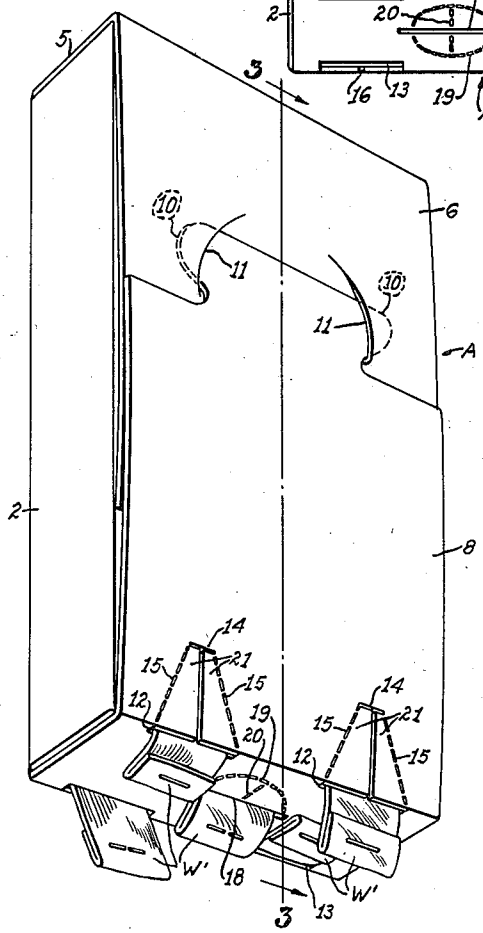


Fig. 2

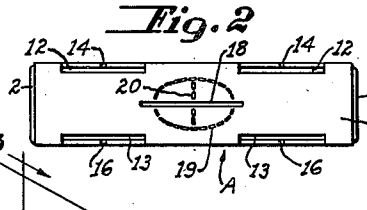


Fig. 3

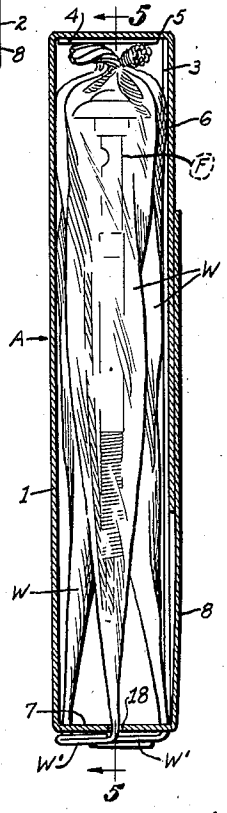


Fig. 4

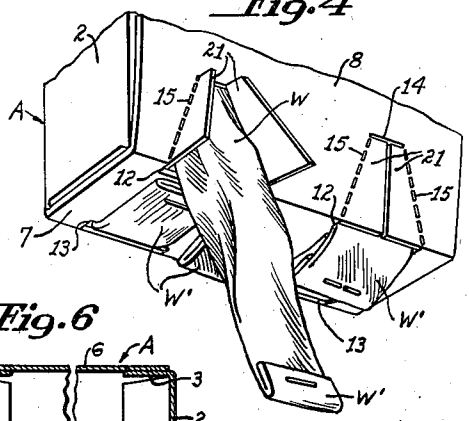


Fig. 5

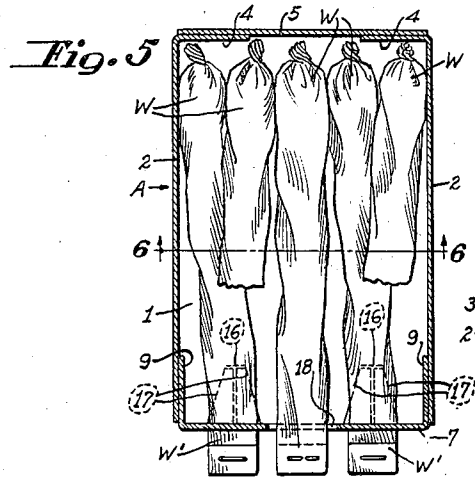
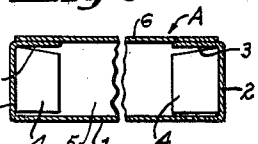


Fig. 6



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PACKAGE

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Application January 27, 1940, Serial No. 315,906

2 Claims. (Cl. 206—56)

This invention relates generally to packages and more specifically to packages adapted to receive fuse links of the type intended for use with electrical protective devices associated with power lines and the like, the predominant object of the invention being to provide an improved package which is so constructed and arranged that any one of a plurality of fuse links contained within the package may be removed therefrom without completely opening the package and without disturbing the other fuse links contained within the package.

As is well known to persons familiar with such matters many electrical protective devices are mounted high on conductor-supporting poles, and when a fuse link associated with a protective device so located is ruptured by a fault occurring on a power line electrically associated with such protective device it is the duty of a lineman to climb the pole and substitute an intact fuse link for the ruptured fuse link so as to restore the protective device to an operative condition. Prior to this invention linemen were not provided with any convenent means for carrying fuse links about, the fuse links usually being removed by the linemen from the rather bulky packages in which they were marketed and being carried about in pockets of their coats or jackets. This arrangement added inconvenience to an already difficult task as the linemen whose work make necessary the wearing of heavy gloves, were required in many cases to remove their gloves and search their pockets for a required fuse link while supported high on poles, often under bad weather conditions.

The main purpose of the present invention, therefore, is to provide an improved package in which a plurality of fuse links are contained, which package is of such size and shape that it will slip readily into a pocket of a lineman's coat or jacket. The individual fuse links are preferably disposed within suitable containers or wrappers when located within the packages, and indexing tabs, which form parts of said containers or wrappers, are extended through apertures formed in the material of the package. These apertures are located immediately adjacent to displaceable portions of the walls of the package which normally are closed to retain the fuse links within the packages but which may be displaced by the fuse links by pulling the tabs of the wrappers thereof to withdraw the fuse links from the package and thereby provide exits in the walls of the package through which the fuse links may pass.

An important feature of the invention is that a package which is convenient to carry and handle is provided from which any one of a plurality of fuse links contained within the package may be withdrawn therefrom by merely pulling the extended tab of the desired fuse link. Thus the linemen are not required to open merchandising packages when fuse links are needed, and it is not necessary that the linemen carry fuse links about loosely in their pockets with the attendant inconvenience of searching their pockets for desired fuse links while supported in rather perilous positions high above the ground. Also because of the protruding tabs fuse links may be withdrawn from the packages without the necessity that the linemen remove their gloves.

Fig. 1 is a perspective of the improved package as it appears when a plurality of fuse links are contained therein.

Fig. 2 is an inverted plan view, on a reduced scale, of the improved package as it appears when no fuse links are arranged therein.

Fig. 3 is a vertical section taken on line 3—3 of Fig. 1.

Fig. 4 is a fragmentary perspective of the lower portion of the improved package as it appears when a fuse link is being withdrawn therefrom.

Fig. 5 is a vertical section, on a reduced scale, taken on line 5—5 of Fig. 3.

Fig. 6 is a fragmentary horizontal section taken on line 6—6 of Fig. 5 but with the fuse links removed from the package.

In the drawing, wherein is shown for the purpose of illustration, merely, one embodiment of the invention, A designates the improved package generally. The package is made from a blank of cardboard, or other suitable material, which is folded and assembled to provide the package. In other words the package A includes a back wall 1 from the opposite sides of which side walls 2 are extended forwardly, said side walls at the forward ends thereof having extended therefrom inwardly projected flaps 3 (Fig. 6). Also at the upper ends of the side walls 2 inwardly projected flaps 4 are extended therefrom. Projected from the top portion of the back wall 1 of the package A is a blank portion which includes a portion 5 that provides the top wall of the package which overlies the flaps 4, and a portion 6 which provides a part of the front wall of the package, the blank portions 5 and 6 being disposed at a substantial right angle with respect to each other. Additionally the blank from which the package A is formed includes a blank portion which is shaped to provide the bottom wall 7 of the pack-

age and a part 8 of the front wall of said package. The bottom wall 7 of the package is provided with flaps 9 at its opposite sides which contact with lower portions of the inner faces of the side wall 2 of the package (Fig. 5). The part 8 of the front wall of the package is provided with opposed locking flaps 10 at its upper end which project into slits 11 in the part 6 of the front wall to lock the package in a closed condition.

The bottom wall 7 of the package A has formed therethrough a plurality of elongated apertures 12 and 13, there being four of said apertures shown in the particular embodiment of the invention illustrated in the drawing. The apertures 12 are located immediately adjacent to the part 8 of the front wall of the package and the apertures 13 are located immediately adjacent to the back wall 1 of said package, the pair of apertures 12 and the pair of apertures 13 being spaced from each other in the direction of the width of the package. At the location of each of the apertures 12 the part 8 of the front wall of the package is provided with a substantially T-shaped slit 14, the longer vertical part of each of said slits being located at the approximate longitudinal center of the associated aperture 12 as shown to good advantage in Fig. 1. Also at the position of each of the T-shaped slits 14 the part 8 of the front wall of the package is provided angular lines of perforations 15 which extend from the opposite ends of the horizontal top part of the slit 14 to the locations of the opposite ends of the associated aperture 12. The back wall 1 of the package A is likewise provided with substantially T-shaped slits 16 which are similar to the slits 14 of the part 8 of the front wall of the package and are arranged in like manner with respect to the apertures 13. Also the back wall 1 of the package is provided with angular lines of perforations 17 at the location of each T-shaped slit 16 which extend from the opposite ends of the top, horizontal part of the slit 16 to the locations of the opposite ends of the associated aperture 13.

At the approximate center of the bottom wall 7 of the package an elongated aperture 18 is formed therethrough (Fig. 2) which extends longitudinally of said bottom wall. Also formed in the bottom wall of the package in association with the elongated aperture 18 is a continuous group of perforations 19 which are arranged in elliptical formation, and a line of perforations 20 which are disposed at a right angle relative to the aperture 18 and extend from one side of the ellipse formed by the perforations 19 to the opposite side thereof.

The fuse links located within the improved package, one of which is illustrated by broken lines in Fig. 3 and is designated by the reference character F, are each contained within an individual container or wrapper W formed of Cellophane or other suitable material. The upper end of each container or wrapper W is closed by twisting or otherwise and the opposite, or lower, end portion of each container or wrapper extends a considerable extent beyond the corresponding end of the fuse link contained therein and is doubled over and stapled, or otherwise sealed. The particular package illustrated in the drawing is designed to receive five fuse links enclosed within their containers or wrappers W and the extended lower end portion of the container or wrapper of each fuse link is passed through one of the apertures 12, 13, or 18 formed in the bottom wall of the package to provide indexing tabs W' for the packaged fuse links; in other words the complete package of fuse links appears as shown in Fig. 1 where the indexing tabs W' of the five packaged fuse links extend through the five apertures in the bottom wall of the package which are designated by the reference characters 12, 13, and 18. Preferably the indexing tabs W' are folded against the bottom wall of the package as shown in Fig. 3, and, if desired, although this is not necessary, the indexing tabs may be lightly tacked in their folded conditions by means of small amounts of adhesive material, or otherwise.

When, in the use of the improved package disclosed herein, a lineman desires to replace a ruptured fuse link of a protective device with an intact fuse link, he climbs to the location of the protective device and draws a package of fuse links from his pocket. He then grasps the tab W' of a fuse link contained in the package and pulls said tab to withdraw the desired fuse link from the package. If the fuse link being withdrawn from the package by the lineman happens to be one of the fuse links whose indexing tabs W' extend through the apertures 12 or 13, the substantially triangular displaceable portions 21 associated with the aperture through which the pulled tab W' extends, will be swung open by the outwardly moving fuse link, as shown in Fig. 4, to provide an exit for the fuse link being withdrawn, the lines of perforations 15 or 17, as the case may be, serving as hinge points for said displaceable portions 21. On the other hand, if the fuse link being withdrawn is the fuse link whose tab W' extends through the aperture 18, the pull on said tab will cause the bottom wall to tear on the line of perforations 19, or on the lines of perforations 19 and 20, to displace portions of the bottom wall of the package and thereby provide an exit for the fuse link being withdrawn. It is obvious, of course, that prior to displacement of the displaceable portions of the package by withdrawal of the fuse links, such displaceable portions are of such rigidity that the fuse links may not unintentionally pass from the package. Also, instead of the linemen carrying packages of fuse links about in their pockets, suitable metallic containers may be supported on poles, or cross-arms thereof, adjacent to protective devices supported thereby, wherein packages of fuse links may be stored for ready use.

I claim:

1. A package for fuse links and the like comprising a housing having an aperture normally of fixed dimensions formed through a wall portion thereof through which a part of a packaged fuse link extends to the exterior of the housing, said aperture being of such dimensions that the fuse link may not pass therethrough and said aperture having portions of its boundary wall displaceable, said displaceable wall portions serving to normally retain the fuse link in place within the housing and being displaced by the packaged fuse link when the exteriorly extended part thereof is pulled to provide an exit of sufficient size through which the fuse link may be withdrawn from the housing, said aperture being formed in one wall of the housing and said displaceable portions being parts of an adjacent wall of the housing and being formed by a T-shaped slit and lines of perforations which extend from opposite ends of the horizontal part of said T-shaped slit to the approximate locations of the opposite ends of said aperture.

2. A package for fuse links and the like comprising a housing having a plurality of apertures normally of fixed dimensions formed through the bottom wall thereof through which parts of packaged fuse links extend to the exterior of the housing, said apertures being of such dimensions that the fuse links may not pass therethrough and each of said apertures having portions of its boundary wall displaceable, said displaceable wall portions serving to normally retain the fuse links in place within the housing and being displaced by the packaged fuse links when the exteriorly extended parts thereof are pulled to provide exits of sufficient size through which the fuse links may be withdrawn from the housing, one of said apertures being located substantially centrally of said bottom wall of the housing and having its associated displaceable portions provided by perforations formed in said bottom wall adjacent to said centrally located aperture, and the displaceable portions of the other of said apertures being formed by cuts in walls of the housing other than the bottom wall thereof.

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