Jan. 18, 1944. J. D. HOFFMAN ET AL 2,339,336

RECEPTACLE

Filed Oct. 4, 1940

Fig. 1

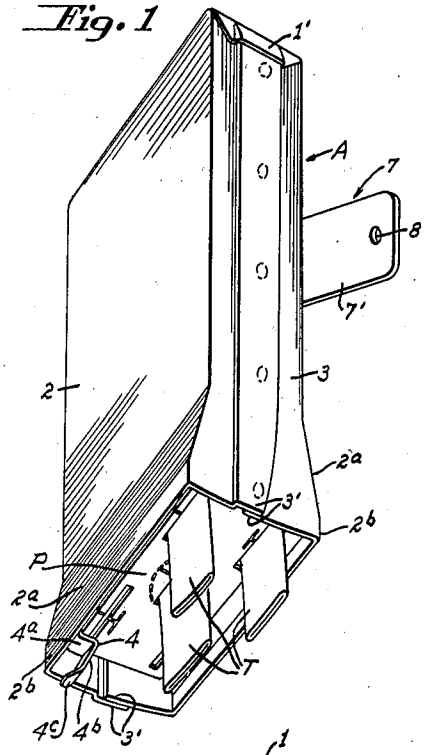



Fig. 2

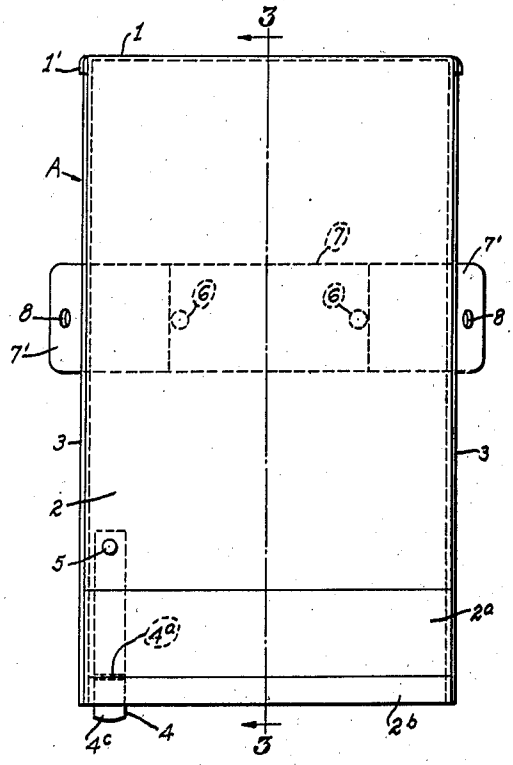



Fig. 3

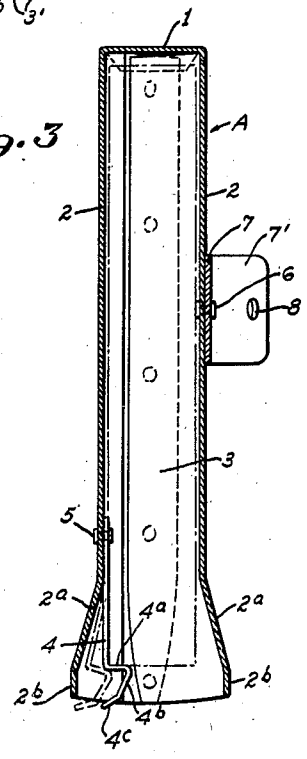
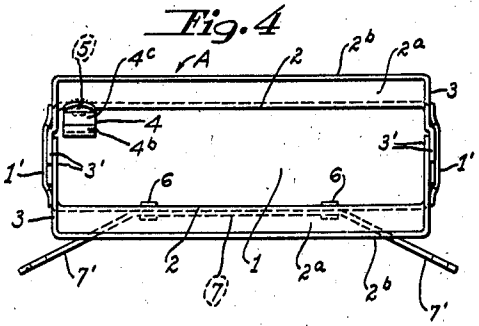



Fig. 4

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# UNITED STATES PATENT OFFICE

2,339,336

## RECEPTACLE

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Application October 4, 1940, Serial No. 359,672

3 Claims. (Cl. 312—35)

This invention relates generally to receptacles and more specifically to receptacles adapted to receive fuse link packages of the general type disclosed in application for United States Letters Patent Serial No. 315,906, filed in the name of Harry J. Fey, on January 27, 1940, now Patent 2,263,001 issued May 12, 1943, the predominant object of the invention being to provide an improved receptacle which may be secured to an electric line pole, or the crossarm thereof, or to any other suitable support, in such manner that the package contained therein and its contents are shielded from the effects of bad weather conditions, and so that the package contained in the receptacle is exposed to view from beneath the receptacle in order that the presence or absence of fuse links in the contained package may be noted from the ground by a maintenance man, or other person in authority.

As is quite generally known to persons familiar with such matters various pieces of electrical protective equipment, which require the use of fuse links in their operation, are mounted on poles which support overhead electrical conductors. In the use of such pieces of electrical protective equipment the fuse links thereof are ruptured by faults occurring on the electrical lines with which the equipment is associated and when this happens the ruptured fuse links must be replaced by intact fuse links to restore the service interrupted by blowing of the fuse links of the protective equipment. Application for United States Letters Patent Serial No. 315,906, referred to above, discloses a package for fuse links which is of such improved construction and arrangement that it may be conveniently carried about by a lineman, and which is characterized by the fact that the fuse links contained in the package may be withdrawn therefrom by being drawn through a wall of the package without opening the package.

It has been conceived that a convenient manner of providing fuse links for ready use when required is to mount on poles, or other supports, which support pieces of electrical protective equipment requiring fuse links, receptacles adapted to receive packages of fuse links. Thus when an electrical fault occurs on a power line, which ruptures the fuse link of a protective device associated with the line, intact fuse links will be always available at the location of the operated protective device for association with the protective device to replace the ruptured fuse link thereof.

Briefly stated the improved receptacle disclosed herein comprises a container of generally rectangular shape which is open at its bottom and includes means for retaining a fuse link package within the container. As stated above the receptacle is preferably mounted on a pole, or its crossarm, in an elevated position adjacent to the location of a protective device which is to be supplied with fuse links taken from the package. The receptacle is closed at its top and at its sides and ends so as to protect the fuse link package from bad weather conditions. Also, because of the open bottom of the receptacle, the bottom of the fuse link package contained in the receptacle, through which tabs of the packaged fuse links extend, is exposed to view from beneath the receptacle so that a person in authority may determine from the ground at all times whether or not the required supply of fuse links is maintained in the receptacle.

Fig. 1 is a perspective view of the improved receptacle looking toward its open bottom and showing a fuse link package contained therein.

Fig. 2 is a side elevation of the receptacle illustrated in Fig. 1.

Fig. 3 is a vertical section taken on line 3—3 of Fig. 2.

Fig. 4 is an inverted plan view of the improved receptacle as illustrated in Fig. 2.

In the drawing, wherein is shown for the purpose of illustration, merely, one embodiment of the invention, A designates the improved receptacle generally. The receptacle A, which is of generally rectangular shape, is formed from sheet metal or other suitable material, being closed at its top, sides, and ends, and being open at its bottom, the top wall, side walls, and end walls of the receptacle being designated in the drawing by the reference characters 1, 2, and 3, respectively. The lower portion of the receptacle A is flared in the direction of the depth of the receptacle, the lower portions of the side walls 2 including outwardly and downwardly inclined portions 2a and portions 2b which extend downwardly from the lower ends of said inclined wall portions and which are disposed in substantial parallel relation with respect to the portions of the side walls which are located above the lower, flared portions of said side walls.

The receptacle A may be constructed in various ways, the particular construction shown in the drawing, which is purely illustrative, involving producing the receptacle from a single sheet of material bent to the required shape and provided with lapped portions 3' formed on the end walls 3 of the receptacle which are spot welded or otherwise secured together. Also the particular receptacle illustrated in the drawing includes flanges 1' formed on the top wall 1, at opposite ends thereof, which are bent downwardly against the upper portions of the end walls 3 and are spot welded or otherwise secured thereto.

Disposed within the receptacle A is a latch element 4 which comprises a strip of spring material, metal, for instance, which is secured to one of the side walls 2 of the receptacle at the inner face thereof by means of a rivet 5 or otherwise. The latch element 4 is located adjacent

to one of the end walls 3 of the receptacle A and its upper portion extends vertically. At the lower end of the vertically disposed upper portion of the latch element 4 is a portion 4a which is extended at an approximate right angle relative to said vertically disposed upper latch portion to provide a shoulder, and extended downwardly and outwardly from the inner end of said portion 4a are angular portions 4b and 4c. The lower angular portion 4c of said latch member 4 preferably extends slightly below the lower open end of the receptacle A, as shown clearly in Fig. 3, so that the lower portion of the latch member may be conveniently moved to the left in Fig. 3, toward the portions 2a and 2b of the adjacent side wall 2, to displace the shoulder provided by the latch portion 4a from the position it occupies in Fig. 3.

The receptacle A has fixed thereto by rivets 6, or otherwise, a supporting bracket 7, said bracket including outwardly extended, angular portions 7' which are readily bendable so as to conform to shapes of supports to which the receptacle A may be secured. Obviously the bracket portions 7' may be secured to a support through the instrumentality of suitable fastening devices (not shown) which would be extended through the apertures 8 formed in said bracket portions 7'.

In the use of the improved receptacle, said receptacle being mounted on a pole or its crossarm at an elevated point with respect to the ground, a package of fuse links is introduced upwardly into the receptacle while the lower portion of the latch element is held in the displaced position shown by dotted lines in Fig. 3. When the fuse link package, which is designated by the reference character P in Fig. 1, has been completely introduced into the receptacle so that its top wall contacts with the top wall of said receptacle, the lower portion of the latch element 4 is released to permit its resiliency to return it to its normal position as shown by full lines in Fig. 3, and the horizontal latch portion 4a will engage the lower wall of the fuse link package, beneath same, to retain the fuse link package within the receptacle A. The bottom wall of the fuse link package P, and side walls of said fuse link package, are provided with displaceable portions, as is clearly set forth in application Serial No. 315,906, hereinbefore referred to, which normally retain the fuse links within the package, and also the packaged fuse links are enclosed in containers which are provided with tabs T that extend through openings formed in the bottom wall of the fuse link package P, as shown in Fig. 1.

When it is desired to remove one of the packaged fuse links from the receptacle A for use with a protective device, the tab T of the selected fuse link is pulled downwardly whereby the fuse link will displace the displaceable portions of the fuse link package to provide an opening through which the fuse link may be withdrawn from the package, the latch element 4 retaining the fuse link package within the receptacle during such withdrawal of a fuse link therefrom. Obviously, when all of the fuse links have been removed from a package P the lower portion of the latch element 4 may be displaced to the dotted line position shown in Fig. 3 whereupon the empty package may be removed and a full fuse link package substituted therefor within the receptacle A.

The flared lower portion of the receptacle A performs several purposes, one of which is that it facilitates convenient introduction of the fuse link package into the lower portion of the receptacle. Also this lower flared portion of the receptacle A provides the required space to permit the displaceable portions of the side walls of the fuse link package P to move outwardly when fuse links retained in the package by these displaceable portions of the side walls of the package are withdrawn from the package. Additionally the flared, lower portion at one side of the receptacle provides space for displacement of the lower portion of the latch element 4 as has been previously explained herein. Finally the flared walls of the lower portion of the receptacle A function as water sheds which conduct rainwater and other moisture away from the lower portion of the fuse link package P.

We claim:

1. A package receptacle comprising a structure having walls for closing the receptacle at its top, sides, and ends, and open at its bottom, and displaceable means adapted to engage a package located within the receptacle so as to retain the package therein, said displaceable means comprising a resilient latch element secured at one of its ends within the receptacle to a wall thereof and provided with an abutment which is adapted to engage a bottom portion of the package located at one side only thereof, a portion of said resilient latch element being located at the open bottom of the receptacle where it may be engaged manually by a thumb or finger of an operator's hand extended through the open bottom of the receptacle to displace a portion of said latch element including the abutment thereof and space being provided within said lower portion of said receptacle to permit such displacement of said portion of said latch.

2. A package receptacle comprising a structure having walls for closing the receptacle at its top, sides, and ends, and having a flared lower portion which is open at the bottom of the receptacle, and displaceable means adapted to engage a package located within the receptacle so as to retain the package therein, said displaceable means comprising a resilient latch having an abutment which is adapted to engage a portion of a package disposed within the receptacle and a portion of said latch being located within said flared lower portion of the receptacle to provide space for said latch portion to be moved to a position where the abutment of the latch is out of its package-engaging position.

3. A package receptacle comprising a structure having walls for closing the receptacle at its top, sides, and ends, and having a flared lower portion which is open at the bottom of the receptacle, and displaceable means adapted to engage a package located within the receptacle so as to retain the package therein, said displaceable means comprising a resilient latch which is secured to a wall of the receptacle at a point adjacent to the upper end of the resilient latch and a lower portion which is provided with an abutment that is adapted to engage a portion of a package disposed within the receptacle, said lower portion of said latch being located within the flared lower portion of the receptacle to provide space for said lower latch portion to be moved to a position where the abutment of the latch is out of its package-engaging position.

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