

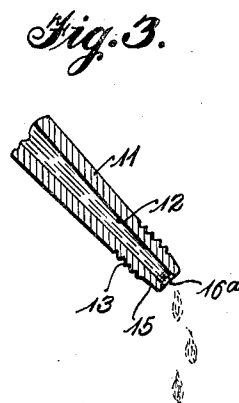
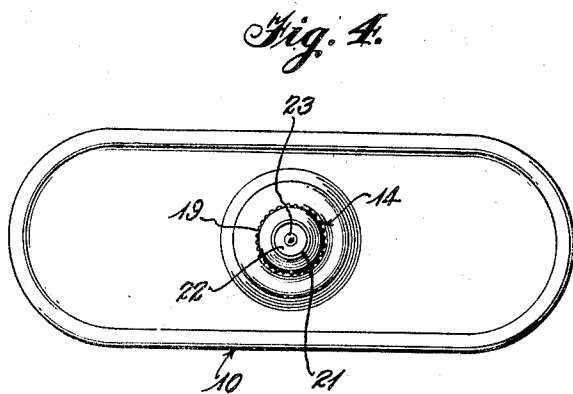
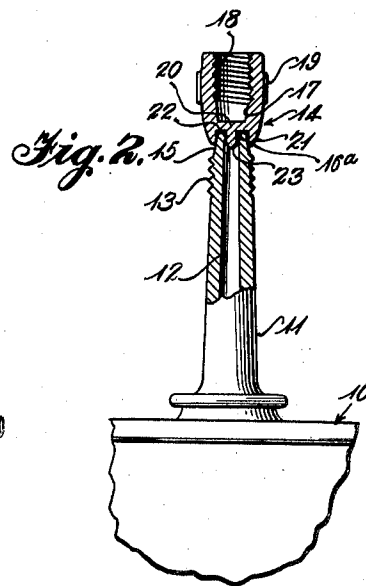
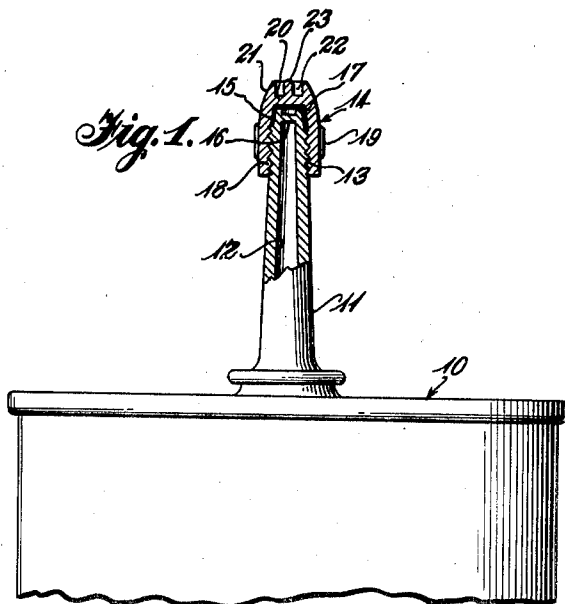
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2,295,688

CLOSURE AND OPENING MEANS FOR RECEPTACLES

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CLOSURE AND OPENING MEANS FOR
RECEPTACLES

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1 Claim. (Cl. 220—27)

This invention relates to a combined closure and opening means for receptacles, and more particularly to such a device as applied to spouted receptacles such as oil cans.

A primary object of this invention is the provision of a closure for sealed cans provided integrally with an improved means for rupturing such a seal.

A secondary object is the provision of such an opening device arranged in such manner as to preclude the possibility of accidental injury to the user thereof.

Other objects will in part be obvious and in part pointed out hereinafter.

The invention accordingly consists in the arrangements of parts, features of construction and combinations of elements, all as will be more fully disclosed hereinafter and shown in the accompanying drawing, wherein:

Figure 1 is a fragmentary side elevational view, partly in section, showing one form of this invention applied to the spout of a receptacle as a closure therefor;

Figure 2 is a fragmentary side elevational view, partially in section, showing the device of Figure 1 in position to be utilized as an opening device;

Figure 3 is a fragmentary side sectional view of the spout of Figures 1 and 2 shown in pouring position; and

Figure 4 is a top plan view showing the parts in the position of Figure 1.

Similar reference characters refer to similar parts throughout the several views of the drawing.

Having reference now to Figure 1, there is generally indicated at 10 a receptacle, in this illustrative embodiment, an oil can, having a spout 11 with a passageway 12 therethrough, and threaded as at 13 to engage a cap member, generally indicated at 14.

Positioned above the threaded portion 13 of spout 11 is a flange or lip 15 of predetermined height, and adjacent, but above the juncture of lip 15 and threaded portion 13, within passageway 12 there is positioned, when the can leaves the factory, a seal 16, in the form of a thin circular disc of suitable soft metal, as for example, solder.

Cap 14 is provided with an interior recess 17 and is threaded as at 18 to permit the same to engage threads 13 and perform the function of a closure as shown in Figure 1. A knurled ridge 19 peripherally surrounding cap 14 serves as a

finger grip therefor to permit the same to be rotated.

Positioned at the top of recess 17 is a partition 20 which serves to close recess 17 and substantially precludes the ingress of air to, or the escape of fluid from, passageway 12 when cap 14 is in the position shown in Figure 1, and after seal 16 has been broken, in a manner to be hereinafter described.

Above partition 20 extends a flange 21 of a height equal to, or slightly less than flange 15 and of an internal circumference slightly greater than the external circumference of flange 15, to provide a recess 22, at the center of which is positioned a relatively blunt projection 23 of a diameter slightly less than that of passageway 12 and of a length slightly in excess of flanges 15 and 21.

Now from the foregoing it will be seen that when it is desired to break the seal, which retains the contents of the can in its original condition from the time the can is shipped until ready for use, it is merely necessary to unscrew cap 14, reverse the same and press downward (see Figure 2), whereupon the inter-engagement of flanges 15 and 21 serving as a guide, projection 23 enters passageway 12 and ruptures seal 16. In order to use the can, it is then merely necessary to tilt the can to the position of Figure 3 (wherein the fragments of seal 16 are indicated at 16a) and the contents will flow through passageway 12 to the desired point of application.

Likewise, when it is desired to reclose the can, cap 14 is merely returned to the position of Figure 1.

It will also be noted that due to the blunt point of projection 23, and its associated flange 21, accidental injury, such as pricking the finger, is positively precluded.

While in the embodiment herein shown flanges 15 and 21 have been shown as having a sliding fit, it will be understood that both may be threaded, flange 15 externally, and flange 21 internally, in order that either end of cap 14 may be used as a closure for spout 11 if desired. Likewise, while threads 18 and 13 are shown, it will be understood that these portions may be made to engage each other merely by a frictional fit if desired.

Now it will be seen that there is herein provided a device which accomplishes all the objects of this invention and others, including many advantages of great practical utility.

As many embodiments may be made of this

inventive concept and as many modifications may be made in the embodiment herein described and shown, it is to be understood that all matter hereinbefore set out or shown in the accompanying drawing is to be interpreted merely as illustrative and not in a limiting sense.

I claim:

In a device of the character described, in combination; a spout having an externally unruptured flange at the outlet end, a frangible seal within said spout, said flange being continuous and extending above and surrounding said seal, a cap for said spout having a closed wall at one end thereof, interengaging means between the spout and cap inwardly of said flange, a seal- rupturing projection of approximately the same

diameter as the bore of the spout extending longitudinally from said wall, and a second flange, said second flange extending longitudinally from said wall and being continuous about said projection, the inside diameter of said second flange being substantially the same as the outside diameter of said first flange, said projection and second flange being of approximately the length of the first flange, whereby when said cap is reversed, said first and said second mentioned flanges coast to guide said projection to and through said seal to rupture the same and engage each other to reshape the outlet of the spout if distorted.

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