July 28, 1942. K. E. BLICKLE 2,291,137

SEALING-WIRE ANCHOR FOR BUNG-FITTINGS

Filed Nov. 24, 1937

FIG. 1.

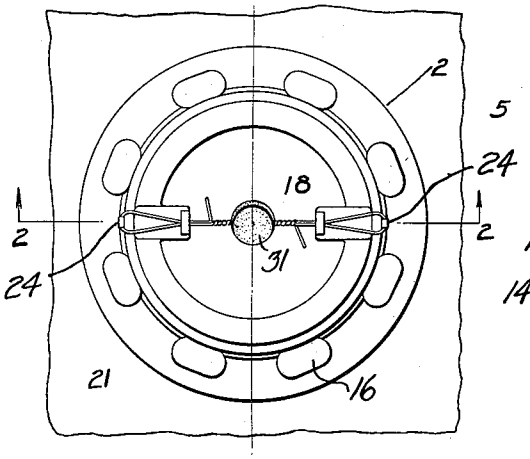
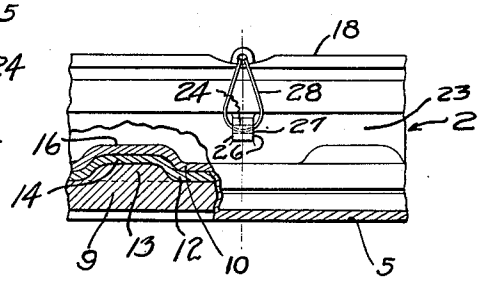


FIG. 3.



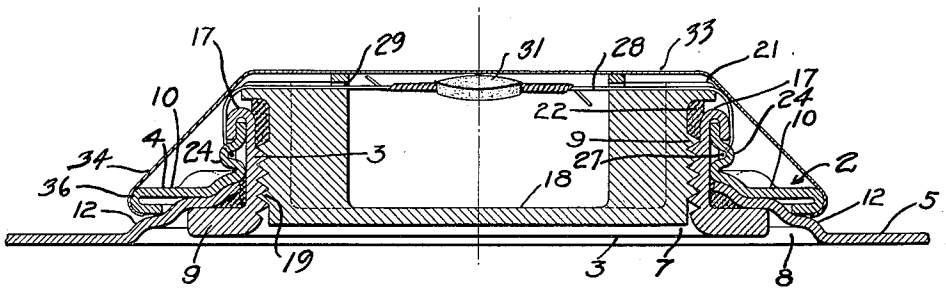


FIG. 2.

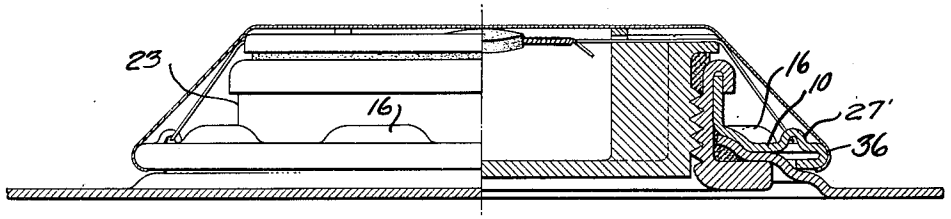


FIG. 4.

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SEALING-WIRE ANCHOR FOR BUNG FITTINGS

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Application November 24, 1937, Serial No. 176,247

2 Claims. (Cl. 220—39)

The invention relates to a means incorporated with a bung fitting for a container, serving to provide an anchor to which may be secured a sealing-wire for preventing undetectable removal of the closure plug in the fitting.

An object of the invention is to provide an anchor means of the character described which, while incorporated as a part of the fitting structure, is so formed and positioned as to avoid the imposition of any material strain on the fitting parts likely to impair the inter-lock of the fitting parts with each other and with the container wall in case rotation of the closure plug is attempted while secured fast to the anchor.

Another object of the invention is to provide an anchoring means of the character described in which the same may be embodied in the fitting structure without requiring any departure from the otherwise original design of the fitting, and in such manner that a sealing cover originally designed to be attached to the fitting without regard to the anchoring means, and the sealing-wire when operatively connected to the closure plug, may still be used and applied in the same manner.

The invention possesses other objects and features of advantage, some of which, with the foregoing, will be set forth in the following description of the preferred form of the invention which is illustrated in the drawing accompanying and forming part of the specification. It is to be understood, however, that variations in the showing made by the said drawing and description may be adopted within the scope of the invention as set forth in the claims.

Referring to said drawing:

Figure 1 is a plan view of a bung fitting provided with the anchoring means of my invention, and showing the plug operatively held in position.

Figure 2 is an enlarged longitudinal sectional view taken through the fitting and plug, the plane of section being indicated by the line 2—2 of Figure 1.

Figure 3 is a fragmentary side elevation of the fitting showing the anchoring means.

Figure 4 is a view similar to Figure 2 but showing a modified construction.

In the embodiment of the invention illustrated in Figures 1 to 3, the means of my invention is incorporated with a bung fitting 2 of the type shown in Letters Patent No. 2,031,351 issued to Richard S. Rheem on February 18, 1936. The fitting comprises inner and outer tubular members 3 and 4 which protrude longitudinally outwardly from a container wall 5 and provide a bore 7 which registers with an opening 8 in the wall about which the fitting is positioned. The attachment of the tubular members to each other and to the wall is effected by clamping between laterally extending flanges 9 and 10 the raised portion 12 of the container wall defining the opening. Rotational displacement of the members with respect to each other and on the wall is prevented by engagement of projections 13 on the flange 9 in depressions 14 in the wall portion 12, which in turn provide projections which engage in depressions 16 formed in the lateral portion or flange 10.

Retention of the parts in the engagement above described is maintained by bending the outer end 17 of the inner member over the corresponding end of the outer member. Closure of the bore so as to prevent access to the interior of the container is arranged to be effected by means of a plug 18, and the bore walls of the fitting are threaded for engagement by the threads 19 of the plug. The plug has preferably mounted thereon a shoulder 21 under which is mounted a gasket 22 which is arranged to seat upon the end 17 when the plug is screwed home.

As may be understood, it is desirable to prevent the unauthorized or undetectable access to the contents, and for this reason in fittings of the character described, some means is usually provided for holding and sealing the closure plug against rotation in the fitting. Generally for this purpose, heretofore sealing-wire was attached to some portion of the plug and anchored to some means in the form of a special accessory added or applied to the fitting or the wall portion adjacent thereto. In accordance with my invention an anchoring means is provided which is incorporated as a part of the fitting structure and formed thereon during the construction of the fitting and the application thereof to the container wall. As will be clear from Figure 2, there is formed in the tubular portion 23 of the outer member 10, a portion 24 which is defined by longitudinally extending slits 26 and is extended outwardly so as to define with the adjacent portion of the member an eye 27. The eye is made large enough to receive and have passed therethrough an appropriate sealing-wire 28. Preferably, a plurality of the eye portions 24 are provided around the side wall of the member, and as here shown, a pair of such portions are provided in diametrically opposed relation. With eye portions as thus provided, the sealing-wire is threaded through both of the eyes

and through an aperture or apertures such as indicated at 29 in the plug, the ends of the wire being twisted together and held in such position by means of a sealing-wafer such as 31. It will be clear that with the anchor for the plug provided on the fitting in the manner above set forth, rotation of the plug when sealed in position will have no influence on the structural association of the fitting parts since longitudinal and rotational displacement of said member is specially guarded against. Furthermore, in view of the fact that the upper end of the portion 24 is immediately inward of the end 17, such end will prevent elongation of the slits in case of an undue upward or downward pull on the portions 24.

A particular advantage had by reason of the specific positioning and form of the anchor means, is that notwithstanding the provision of such means on the fitting and the use of the sealing-wire connected therewith and to the plug, a cover or cap of a design adapted for use with the fitting when without the anchoring means, is still appropriate for use with the fitting. Such a cover or cap 33 as shown in Figure 2 and as illustrated, comprises a body portion which is arranged to overlie the plug and a skirt portion 34, which extends over the side portions of the fitting and is secured at its free edge to the outer periphery 36 of the flange 10. It will be seen that not only do the anchoring portions amply clear all parts of the cover but are so inobstrusive and protected that the exterior of the fitting remains for all other purposes practically the same as without the anchoring means.

In Figure 4 I have shown a slightly modified form of the invention. In this embodiment the anchoring eyes 27' are formed in the lateral flange 10 of the outer member and are located sufficiently inwardly of the periphery of the flange and of the depressions 16, so as to avoid any interference with the attachment of the cap to the flange or the proper engagement of the depressions.

I claim:

1. In structure of the character described, a container wall having an opening therein, a bushing received in said opening and a member interengaged with said bushing and partly overlying the same for securing the bushing in place in said opening, said member having a collar portion, and a laterally-extending skirt portion terminating in a peripheral cap-seal-engaging rim, the stock of said member at a position spaced from said rim being slitted on spaced lines and the portion of said stock between said lines being depressed outwardly from the normal contour of said member to provide a sealing-wire receiving eyelet.

2. In structure of the character described, a container wall having an opening therein, a bushing received in said opening and a member interengaged with said bushing and partly overlying the same for securing the bushing in place in said opening, said member having a collar portion, and a laterally-extending skirt portion terminating in a peripheral cap-seal-engaging rim, the stock of said member at a position spaced from said rim being slitted on spaced lines and the portion of said stock between said lines being depressed outwardly from the normal contour of said member to provide a sealing-wire receiving eyelet, and the peripheral cap-seal engaging portion of said rim being formed into a bead commencing beyond the end of said sealing-wire receiving eyelet, whereby a cap seal may be secured over the member and bushing interengaged therewith without interference from said eyelet.

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