Dec. 29, 1931. I. H. RIEKE 1,838,285

BUNG FOR CONTAINERS

Filed March 3, 1930

Fig. 1.

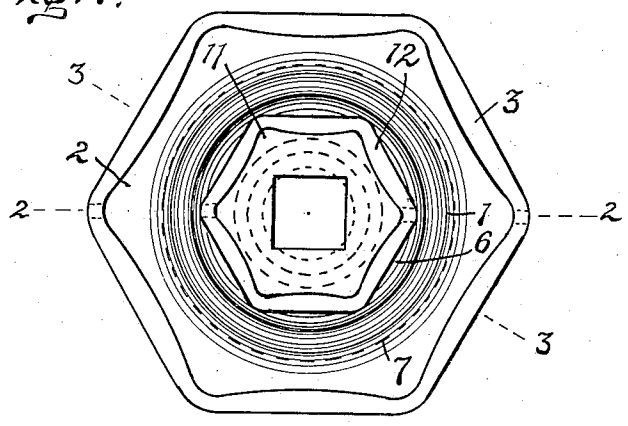


Fig. 2.

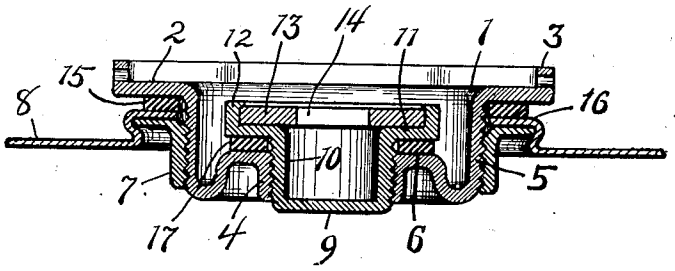
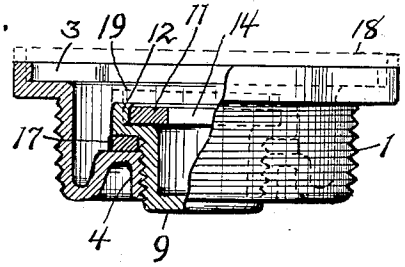


Fig. 3.



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UNITED STATES PATENT OFFICE

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BUNG FOR CONTAINERS

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This invention relates to improvements in bungs for containers, and the object thereof is to afford means for closing the bung opening of a container, so constructed as to provide a normally closed secondary opening into the container through the closing means, of smaller diameter than the bung opening. Another object is to afford a bung for a container, provided with a threaded opening therein for the reception of a faucet or pipe through which the contents of the container may be withdrawn, and also to provide a plug for closing the opening in said bung, which plug is located in the bung so as not to obstruct a wrench or other tool as it is applied to the bung to remove it from or insert it into the bung opening of a container. And, a further object is to provide a bung of great strength, light in weight, and inexpensive to manufacture.

A preferred illustrative embodiment of the invention is shown in the accompanying drawings, in which:—

Fig. 1 is a plan view of a bung embodying the invention;

Fig. 2 is a vertical section of the bung on the line 2—2 of Fig. 1 and includes also the bung fixture of a container to which the bung is applied; and

Fig. 3 is an elevation of the bung partly in section on the line 3—3 of Fig. 1.

The illustrative embodiment of the invention comprises a cylindrical shell 1, preferably formed of sheet metal, and which has formed at one end thereof an outwardly extending radial flange 2, the outer perimeter of which is of polygonal shape and has a marginal rim 3 that is upset to provide a reinforced wrench-head adaptable for the application of a wrench for turning the bung, (said wrench not being shown). The end of the shell 1, opposite the flange, has an integral portion of reduced diameter forming a sleeve 4 that is concentrically disposed with respect to the outer portion 5 of the shell, and the intervening portion of the metal sheet of which the bung is formed is contiguous with the upper part of the sleeve 4 and the lower end of the outer portion 5 of the shell, and is folded up into said outer portion to provide an annular seat 6 surrounding the top of the sleeve so that said sleeve and annular seat are set up into and encompassed by the lower end of the large or outer portion of the shell.

The sleeve 4, the outer cylindrical portion 5 of the shell, the flange 2 and rim 3, together with the part of the metal sheet that connects the sleeve and said outer portion, preferably are formed of a single piece of metal pressed into the desired shape by means of suitable dies (not shown) applied in the usual manner known in the art.

The exterior of the large cylindrical portion 5 of the shell is externally threaded, and the sleeve 4 is internally threaded, so that the large portion 5 of the shell may be screwed into the bung ring 7 of a container 8, and a plug 9 may be screwed into the sleeve 4.

Preferably, the plug 7 is made of sheet metal shaped to form a cylindrical shell 10 which is closed at one end, and has at its opposite end an outwardly extending radial flange 11, the outer perimeter of which is polygonal in shape and has a marginal rim 12 that is upset so as to provide a reinforced wrench-head adaptable for the application of a wrench (not shown) for turning the plug. In the top of the plug is disposed a plate 13 having a central square opening 14 made therein, the plate being permanently secured in place by the rim 12 which is compressed about the outer margin of the plate. The square opening 14 in the plate is made for the reception of a key-wrench (not shown) by which the plug may be forcibly screwed into or withdrawn from the sleeve.

The rim 3 of the shell 1 is initially formed as indicated by the dotted line 18 in Fig. 3, and the thickness of the initially formed rim is subsequently increased, especially in those portions between the corners of the wrench-head, by applying pressure endwise to the rim so that it becomes upset and thereby strengthened. The rim 12 of the plug 9 also is initially formed as indicated by the dotted line 19 and is subsequently upset and compressed around the edge of the plate 11, so that the rim is thereby strengthened and the

plate permanently secured within the wrench-head of the plug.

By means of this appliance access may be had to the interior of the container through the sleeve of the bung by removal of the plug, or, through the bung opening by removal of the bung. The plug is so proportioned relative to the bung that the top of the plug, when the plug is in closed position, extends in a plane below that of the wrench-head of the bung, and the bung is so formed with respect to its lower end that the sleeve 4 and the plug when in closed position, are contained substantially within the large cylindrical portion 5 of the bung. The bung and the plug thus formed and assembled constitute a compact closure applicable to an ordinary bung fixture. Also, the plug when in closed position, being contained within the cylindrical shell of the bung below the wrench-head thereof, permits unobstructed manipulation of a wrench as when applying it to the bung to effect the removal thereof from the bung fixture, or in applying the bung thereto.

Claims:—

1. A bung for a container comprising a hollow cylindrical shell that has at one end thereof a radially disposed external flange of polygonal shape having an upturned outer perimeter to provide a wrench head, the opposite end of said shell having a portion of reduced diameter forming a sleeve concentrically disposed with respect to the outer portion of the shell, the intervening part of the shell between said outer portion and said sleeve being folded up into said outer portion contiguous with the lower end of the outer portion and top of said sleeve to form an elevated gasket seat spaced downwardly from said wrench head, said outer portion being externally threaded, and said sleeve being internally threaded, and a plug fitted in the sleeve to close the opening therein.

2. A bung for a container comprising an externally threaded shell having a wrench head formed at one end thereof and an internally threaded sleeve integrally connected with its opposite end by a portion of said shell that is folded up into the corresponding end of the shell to provide an elevated gasket seat in the shell around the top of said sleeve, and a plug removably secured in said sleeve for closing the opening therethrough, said sleeve and plug being disposed within said shell in a plane below that of said wrench head.

3. A bung for a container consisting of a sheet metal stamping formed into a cylindrical shell shaped and externally threaded to fit in the bung fixture of a container, and provided with a wrench head at one end and an integrally connected internally threaded sleeve at its opposite end, which sleeve is set up into and is encompassed by said opposite end.

4. A bung for a container formed of sheet metal having a threaded cylindrical portion for closing the bung opening of a container, and a flange portion having a contiguous rim that is upset upon itself and its lateral thickness thereby increased to provide a reinforced wrench-head.

In testimony whereof I affix my signature.

IRVIN H. RIEKE.