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L. B. WACKMAN

1,789,928

BUSHING STRUCTURE

Filed Jan. 25, 1928

Fig. 1.

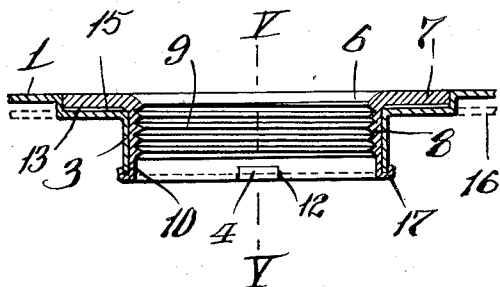


Fig. 2.

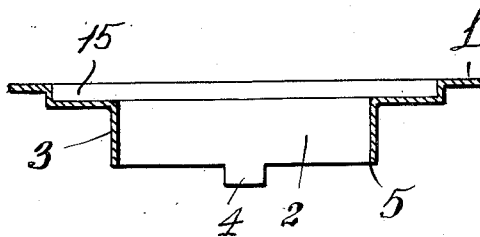


Fig. 3.

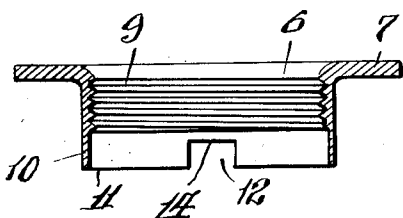


Fig. 4.

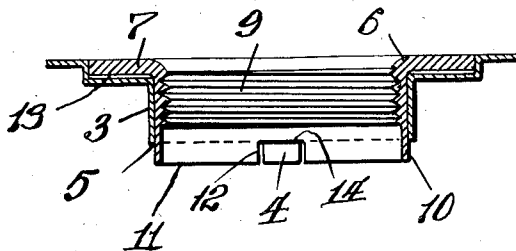


Fig. 6.

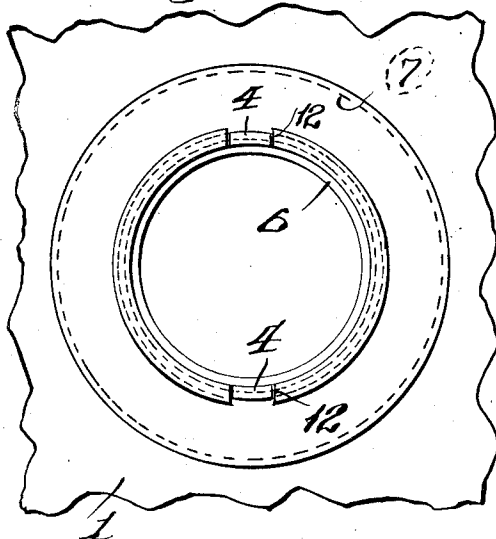
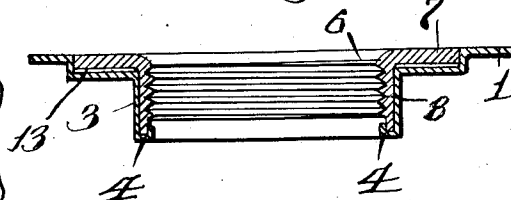


Fig. 5.



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UNITED STATES PATENT OFFICE

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BUSHING STRUCTURE

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This invention relates to an improvement in a bushing structure and has for its primary object the purpose of providing a bushing in a metallic barrel head in a manner wherein the bushing cannot be turned by the plug thereof during tightening or loosening of the plug.

Another object of the invention is in providing an inexpensive bushing structure in a metallic barrel head and which is exceedingly simple in the making and mounting thereof.

Other and further objects will appear in the specification and be specifically pointed out in the appended claims, reference being had in the accompanying drawings, exemplifying the invention, and in which:

Figure 1 is a fragmentary vertical section of this improved bushing structure showing the manner of securing it to a barrel head.

Figure 2 is a fragmentary vertical section of that portion of the barrel head in which the bushing is mounted and showing the peculiar formation of the bung hole.

Figure 3 is a vertical section taken through the bushing showing its formation before it is inserted in the bung hole of the barrel head.

Figure 4 is a vertical section showing the inserted position of the bushing in the bung hole of the barrel head before the securing operation has been carried out.

Figure 5 is a vertical section taken approximately on the line V—V of Fig. 1.

Figure 6 is an inverted view of Fig. 1.

Referring by numerals to the accompanying drawings, 1 designates a fragmentary portion of a metallic barrel head having the bung hole or opening 2 formed therein and during the formation of the bung hole it is requisite that the material of the barrel head surrounding the bung hole be pressed downwardly or inwardly so as to provide a neck 3 of some depth or length. In forming the neck 3 surrounding the bung hole 2 a plurality of tongues 4 are provided which extend from the lower edge 5 of the neck.

The bushing 6 to be inserted in the bung hole 2 is comprised of an annular flange 7 having a concentrically formed depending neck 8, said neck being of a diameter so as to

be snugly fitted in the bung hole. The neck of the bushing 6 has an interiorly threaded portion 9, said neck beneath said threaded portion having a portion 10 which is reduced in thickness annularly there-around and extending from the lower edge 11 of said bushing and within the portion 10 is a plurality of recesses 12.

In securing the bushing 6 in the bung hole of the barrel head a gasket 13 is first mounted over the neck 8 of the bushing and seated against the flange 7 then the neck 8 is inserted in the bung hole 2 of the bung hole neck 3 of the barrel head as shown in Fig. 4. In this seated position of the bushing it will be noted from an inspection of Fig. 4 that a part of the portion 10 of the neck 8 of said bushing is depended beneath the edge 5 of the bung hole neck 3 and the recess 12 of the bushing neck 8 is positioned in alignment with the tongue 4 of the neck 3. The tongues 4 of which there are a plurality are each turned inwardly through respective recesses 12 and are bended over respective edges 14 of said recesses. The extending part 10 is then outwardly pressed over the lower edge 5 of the bung hole neck 3 and curled as designated at 17, this operation thoroughly drawing the flange 7 of the bushing 6 tightly against the gasket 13 and firmly securing the bushing in the bung hole neck 3. The securing of the tongues 4 in respective recesses 12 of the bushing 6 will prevent said bushing being turned in the neck 3 of the barrel head by frictional strains from the turning of the closure or bung, not shown, when the bung is mounted in the bushing.

From the aforesaid description of this improved bushing structure in connection with a metallic barrel, it is obvious that a simple, inexpensive and efficient bushing structure is provided.

It is to be noted that several figures of the drawings show a counter-sink or depression 15 for the reception of the flange 7 of the bushing 6 whereby the flange 7 and barrel head 1 provide a flush surface, but if it is desired the depression can be eliminated so that the flange 7 will rest on top of the

barrel head as shown by dotted lines 16 in Fig. 1.

What I claim is:—

1. A container having a bung hole with a depending neck formed in one of its walls, a pair of tongues depending from the lower end of said neck, a bushing mounted in said neck having a pair of recesses, each of said tongues adapted to be engaged in a respective recess of said bushing, said bushing having a portion of its lower extremity bent over the lower edge of said neck.

2. A barrel having a bung hole formed in one of its walls, a depending neck formed of the material surrounding the bung hole having portions projecting from its lower end, an interiorly threaded bushing mounted in said neck having a relatively thin lower extremity bent over the lower edge of said neck, said lower extremity of said bushing having recesses therein for cooperation with the projections of said neck for preventing said bushing being turned in said neck.

3. A metallic container having a bung hole formed in one of its walls with a surrounding depending neck and having portions projecting from the lower end of the neck, an interiorly threaded bushing mounted in said neck having a relatively thin lower extremity with recesses therein, each of said projecting portions of said bung hole neck adapted to be engaged in a respective recess of said bushing and bent inwardly and over the lower extremity of the bushing neck beneath the threads thereof, the portions of the lower extremity of said bushing between the recesses thereof being bent outwardly over the lower edge of said bung hole neck.

4. A container having a bung hole with a depending neck formed in one of its walls, a plurality of tongues extending from the lower end of said neck, a bushing mounted interiorly of said neck having a plurality of recesses, each of said tongues adapted to be engaged in a respective recess of said bushing, the lower extending end of said bushing between the recesses being bent over the lower edge of said neck between the tongues thereof.

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