

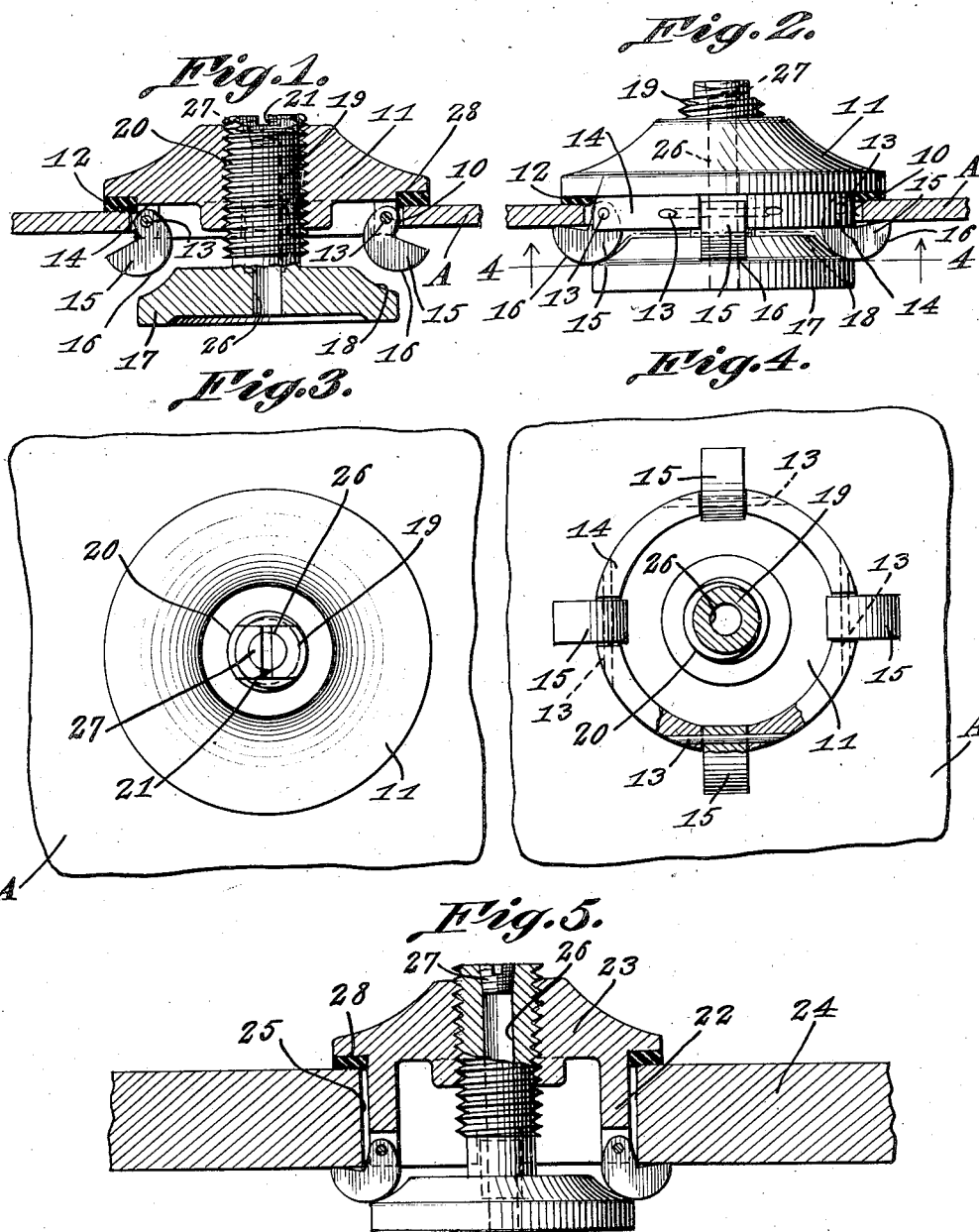
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LOCKING CLOSURE FOR CONTAINERS

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LOCKING CLOSURE FOR CONTAINERS

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1 Claim. (Cl. 220—25)

The invention relates to a locking closure for containers and more especially to locking cap-plugs or bungs for wood or metal drums, tanks or other containers.

5 The primary object of the invention is the provision of a closure of this character, which is easily insertable in and removed from a hole or opening and when inserted will seal the hole or opening and is susceptible of heavy usage and
10 has maximum life, it taking the place of wood bungs.

Another object of the invention is the provision of a closure of this character, wherein the same is susceptible of lock within a hole or opening without regard to the thickness of the material having such hole or opening and when
15 locked will be firmly and securely held in place for the sealing of the hole or opening, the closure being novel in its construction and readily and easily applied to a container or removed therefrom when serving as the closure therefor.

A further object of the invention is the provision of a closure of this character, which is simple in its construction, thoroughly reliable
20 and efficient in its purpose, readily and easily operated for the locking and unlocking thereof, susceptible of wide range of adjustment for the fitting thereof to a wall having an opening or hole according to its thickness or the depth of
25 such hole or opening, strong, durable, and inexpensive to manufacture.

With these and other objects in view, the invention consists in the features of construction, combination and arrangement of parts as will
30 be hereinafter more fully described in detail, illustrated in the accompanying drawing, which discloses the preferred embodiment of the invention, and pointed out in the claim hereunto appended.

40 In the accompanying drawing:

Figure 1 is a fragmentary vertical sectional view showing a hole bearing end of a container with the closure constructed in accordance with the invention fitting said hole and unlocked.

45 Figure 2 is a view similar to Figure 1 showing the closure in elevation and locked.

Figure 3 is a top plan view.

Figure 4 is a sectional view on the line 4—4 of Figure 2 looking in the direction of the arrows.

50 Figure 5 is a view similar to Figure 2 showing the closure partly in section and of greater dimensions for the fitting thereof to the hole bearing head of a closure of considerable thickness.

55 Similar reference characters indicate corre-

sponding parts throughout the several views in the drawing.

Referring to the drawing in detail, particularly Figures 1 to 4, A designates a portion of a hole bearing wall of a container which may be either
5 a wooden or metal tank, barrel or other receptacle and the hole 10 therein being circular in shape so that such container or receptacle can be filled or its contents discharged therefrom. Adapted for fitting within the hole 10 of the
10 container A is a closure constructed in accordance with the invention and hereinafter fully described.

The closure comprises a cap body 11, in this instance of circular form and having a diameter greater than the hole 10 so as to be seated
15 concentrically of the said hole against the wall bearing the same, there being provided a gasket or washer 12 at the point of fitting of the cap body 11, so that the latter can be sealed thereby.

Pivotally supported by this cap body 11 and hung by pivots 13 engaged in a flange 14 upon
20 said body are diametrically opposed swinging locking jaws 15, these having cam edges 16 engageable by a spreader disk 17 having the
25 beveled annular shoulder 18.

The spreader disk 17 is formed with a threaded stem 19 projecting centrally therefrom and working in a companion threaded center opening 20
30 formed in the cap body 11, the said stem being of a length to allow for range of adjustment of the spreader 17 to permit of unlocking movement of the jaws 15, the spreader being of a diameter less than the diameter of the hole 10 so that it will
35 freely pass through this hole for the removal of the cap body from the container or receptacle.

The outer end of the stem is provided with a screw driver slot 21 so that the spreader 17 can be adjusted and this slot 21 is in the outer exposed
40 end of said stem. On adjustment of the spreader to have it move toward the jaws 15 when in unlocking position they will be moved to locking position for the securing of the cap body in place for closing and sealing the opening 10. On adjustment of the spreader 17 away from the jaws
45 15 when in locking position, these will swing by gravity to unlocking position so that the cap body 11 can be released and freed for removal from the container or receptacle, the spreader 17 being passed through the hole or opening 10 without
50 interference.

In Figure 5 of the drawing there is shown a slight modification of the closure, wherein the annular flange 22 is extended so as to accommodate the cap body 23 to a hole having consider-
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able depth where the wall 24 of the closure or receptacle is of considerable thickness bearing such hole 25.

5 In the use of the closure the same is readily insertable in a hole or opening in a closure or receptacle and is locked in position to seal such hole or opening. The closure is readily and easily adjusted for locking and unlocking action and can be fitted with a container or receptacle with dis-
10 patch and also is conveniently removed or detached. The closure will render the hole or opening leakproof, particularly in the use of the gasket or washer 12 in association with said closure.

15 The spreader disk 17 and its stem 19 has a threaded bore 26 in which is fitted a removable plug 27 and the purpose of such bore, on removal of the plug, is to drain a small quantity of the contents from the container. In lieu of the plug 27, or on the removal thereof, a valved faucet
20 or drain cock can be attached in this bore for the purpose named.

The cap body 11 in the inner face thereof has a groove or channel 28 next to the gasket 12 to enable the latter to more properly perform its duty for sealing purposes.

What is claimed is:

5 A closure of the character described, comprising a pair of disk-like members arranged in confronting relation to each other, a plurality of jaws pivotally supported by one of said members, a screw threaded shank formed with the other 10 member for adjustably connecting the members to each other, a cam face formed on one of the members to engage the jaws for effecting the closing thereof to fasten the members in an opening and for closing the latter, the said shank hav-
15 ing a passage therein and opening through said members and a removable plug fitting said passage for closing the same.

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