Sept. 20, 1927. 1,643,009

F. H. GOUFFER

CAN OR RECEPTACLE

Filed Aug. 1, 1925

Fig. 1.

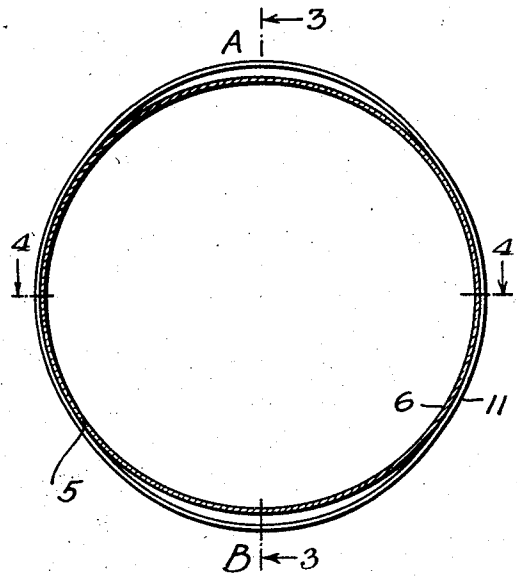


Fig. 2.

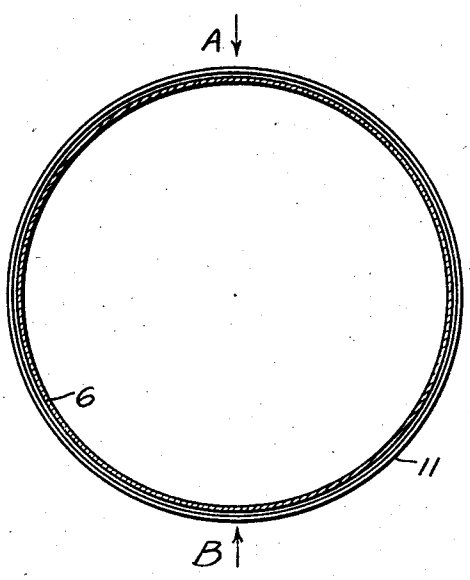


Fig. 3.

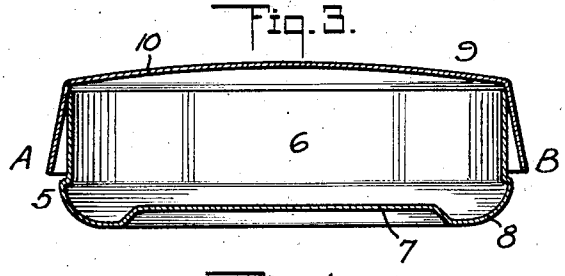


Fig. 4.

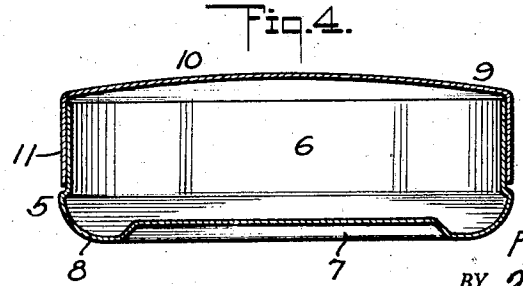
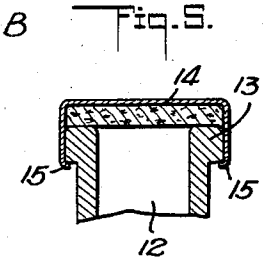


Fig. 5.



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UNITED STATES PATENT OFFICE.

FRANK HENRY GOUFFER, OF CARLISLE, PENNSYLVANIA.

CAN OR RECEPTACLE.

Application filed August 1, 1925. Serial No. 47,530.

My invention relates to cans or receptacles generally and has for its primary object the provision of novel means for securing the cover to the body of the can to effect a hermetic seal normally, and, further, the construction of a cover which will freely function to permit it to be quickly and positively removed from the body without the use of tools and particularly without fear of injury to the fingers of the hand of the user.

Other objects and advantages of my invention will become apparent from a consideration of the accompanying drawings, wherein—

Figure 1 is a horizontal section through the can and its cover taken on a line near the base of the cover;

Figure 2 is a section through the can showing the expanded condition of its wall with respect to the co-acting wall of the can body;

Figure 3 is a vertical section through the can on line 3—3 of Figure 1;

Figure 4 is a view similar to Figure 3 taken on line 4—4 of Figure 1; and

Figure 5 is a view similar to Figure 2 of a slightly modified form of my invention.

With reference to Figures 1 to 4, inclusive, of the drawings, and in carrying the invention into practice, I employ a can or receptacle body 5 having a uniformly cylindrical wall 6, an up-struck bottom 7, and an annular reinforcing bead 8 between said bottom 7 and said wall 6.

The cover 9 is constructed of spring sheet metal or suitable well-known material, and same is formed with a concavo-convex crown 10 and a depending body embracing and sealing wall 11. This wall 11 is of two cross sectional dimensions, and is preferably ovally shaped in horizontal section, as illustrated in Figure 1. The cover, at the ends of its long axis, is slanted downward and outward with respect to the vertical cylindrical wall 6 of the aforesaid body of the can, and these ends, which I now designate A and B, respectively, are what I will refer to as cover releasing portions adapted to be pressed inwardly by the fingers of the hand so that the cover can be manually deformed and sprung from a normal sealing position to a released or unsealing position.

Reference shall now be had to Figure 4 of the drawing, wherein it wil be observed that the inner surfaces of the wall 11, except at points A—B, are in intimate sealed contact with the outer surface of the wall 6. When the cover is in this applied position, it is so maintained by the action of friction and the resiliency of the wall 11 that it cannot be accidentally removed. The space between the two sections of the can is closed and the contents of the can hermetically sealed in order that same will not be subject to premature deterioration, making the can exceedingly useful in connection with the sale of shoe polishes or the like.

When it is desired to open the can, the portions A—B of the cover are grasped between the thumb and the middle finger of the hand and pressure thereof advanced against these portions This results in the application of stress along the long axis of the cover, and in consequence thereof there is a resultant accommodation of the force thus applied against the walls along the minor axis of the cover, the force being gradually absorbed or balanced until the walls of the cover are about in concentric relation to the walls 6 of the body 5. Also, and incident to this action of force against the portions A—B, there is a slight tendency of the cover to lift or spring up or urge itself toward opening movement, largely due to the spring action of the concavo-convex crown 10 of the cover. It is not necessary to exert any upward prying force to the cover whatever. When the fingers are again released from the points A—B, the cover assumes its normal position and may again be placed in air-tight contact with the body of the can.

In the form of my invention shown in Figure 5, the container 12, which may represent the neck of a bottle or the like, is provided with a flange 13 and the cover or cap 14 which I employ is substantially the same as the first form, except that at the ends of the short axis thereof I provide depending resilient lugs 15—15 adapted to yieldingly engage under the flange 13 when the cap is applied. By pressing upon the ends of the cap in line with the long axis thereof, the lugs 15—15 are sprung away from the flange 13 and the cap rendered free for instant removal.

Although I have herein shown and described only two forms of can or container embodying mv invention, it is to be understood that various changes and modifica-

tions may be made therein without departing from the spirit of the invention and the spirit and scope of the appended claim.

I claim as my invention:

A can comprising a body having a cylindrical wall, and a cover having a depending flange cylindrical in contour at its point of connection with the cover so as to normally fit and have uninterrupted contact with said wall, to thereby provide a hermetic seal between the wall and flange, said flange having portions at diametrically opposed points flared downwardly and outwardly from the point of connection with the cover to the free edge of the flange, so that the latter is provided with a long axis and a short axis, whereby upon exerting inward pressure against said portions, the flange will be expanded along the line of its short axis to thereby release the cover from the body.

FRANK HENRY GOUFFER.