

Feb. 23, 1937.

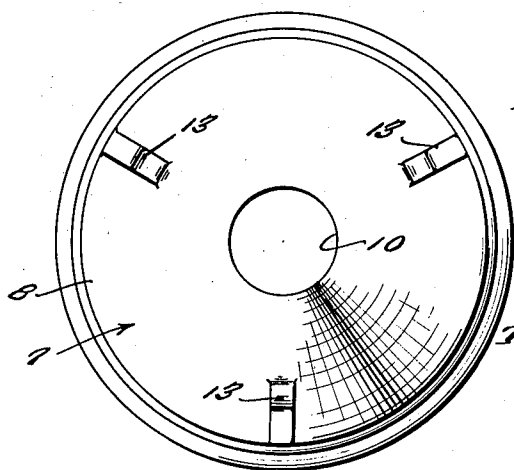
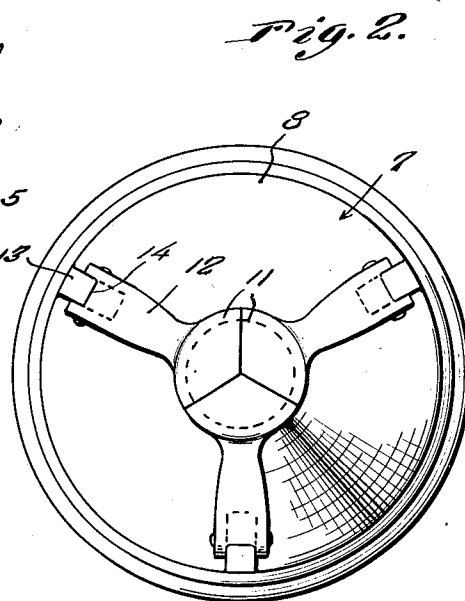
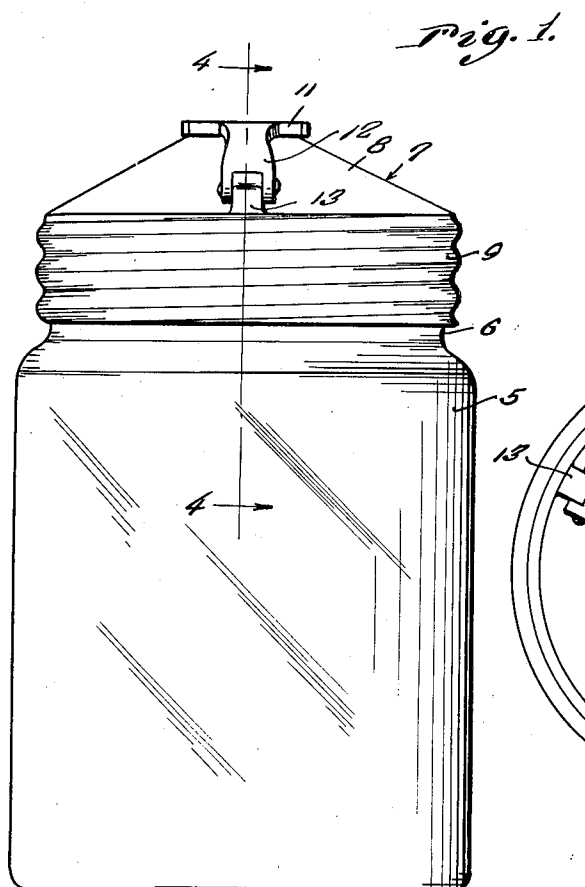
T. McPHAIL

2,071,700

CONTAINER CLOSURE

Filed April 29, 1936

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

Fig. 4.

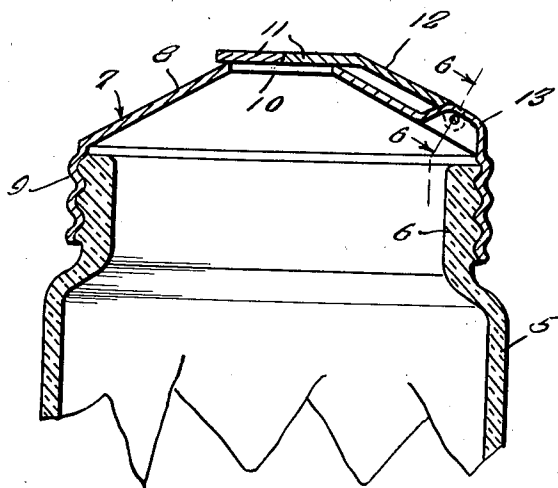


Fig. 6.

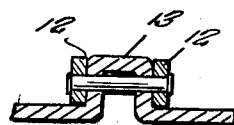


Fig. 5.

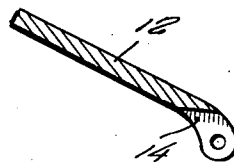
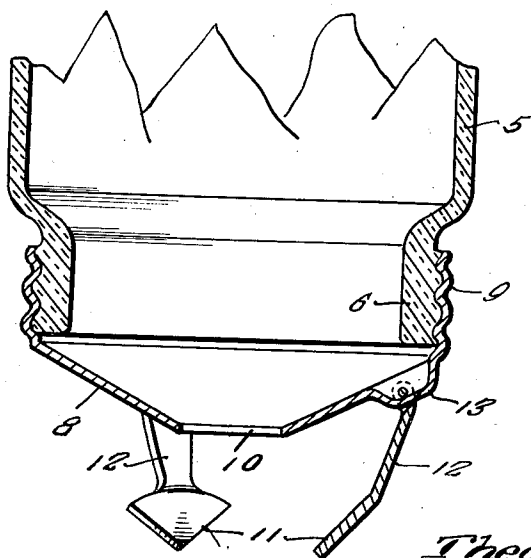


Fig. 7.

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UNITED STATES PATENT OFFICE

2,071,700

CONTAINER CLOSURE

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Application April 29, 1936, Serial No. 77,065

1 Claim. (Cl. 221—6)

This invention appertains to new and useful improvements in closures for containers, and is an improvement on my Patent No. 2,035,329, issued March 24, 1936.

5 The principal object of the present invention is to provide a closure which will automatically open when the container is inverted, and which will automatically close when the container is righted.

10 Another important object of the invention is to provide a container closure constructed in such a manner as to permit manufacture at a low cost with a considerable saving in material.

Other important objects and advantages of the invention will become apparent to the reader of the following specification.

In the drawings:

Figure 1 represents a side elevational view of the closure on a container;

20 Figure 2 is a top plan view;

Figure 3 is a top plan view with the closure members removed;

Figure 4 is a fragmentary vertical section on line 4—4 of Figure 1;

25 Figure 5 is a fragmentary vertical sectional view with the container inverted and the closure members in open position;

Figure 6 is an enlarged fragmentary detailed sectional view on line 6—6 of Figure 4;

30 Figure 7 is a fragmentary longitudinal sectional view through one of the closure members.

Referring to the drawings wherein like numerals designate like parts, it will be seen that numeral 5 represents the container having the externally threaded neck portion 6.

35 Numeral 7 generally refers to the closure which consists of the frusto-conical shaped top portion 8 and the peripheral depending and thread-formed skirt portion 9 for engagement with the threads of the neck 6. The upper portion of the top 8 is provided with the discharge opening 10 over which the segmental-shaped head portions 11 of the closure members are adapted to set as shown in Figure 4 and again in Figure 2.

Obviously any number of these closure members desired may be employed, but in the present instance three are shown, and obviously the segmental heads 11 must be each of 120 degrees extent at its curved edge so that the three make up the closure assembly. Each of these heads 11 is provided with an obliquely extending arm 12 which is bifurcated at its end removed from its head 11 to form leg members 14 straddling a corresponding upwardly bulged rib portion in the top 8 of the closure adjacent the lower edge portion or skirt portion 9 thereof. This bulged portion is denoted by numeral 13. Each of the arms 12 at its thrust portion 14 is formed in the manner of a bevel, so that while the arms 12 can move to the closing position shown in Figure 4, they can only move to a limited open position as the edge of the beveled portion 14 shall strike against the bulged portion 13 and hold the closure members as shown in Figure 5.

20 While the foregoing specification sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size, and material may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

Having described the invention, what is claimed as new is:

A closure of the character described comprising a receptacle top structure of frusto-conical shape having an opening at the top thereof, the lower portions of the inclined side portions of the cap being bulged outwardly to define elongated ribs, segmental closure members adapted to swing together over the said opening to close the same, each of these segmental closure members being provided with a bifurcated arm adapted to straddle the upper end portion of a rib, the crotch portions of the said bifurcated portions of the arm being beveled so as to avoid the upper end portions of the ribs and to stop against the outer portions of the rib when the segmental closure members are in open position.

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