

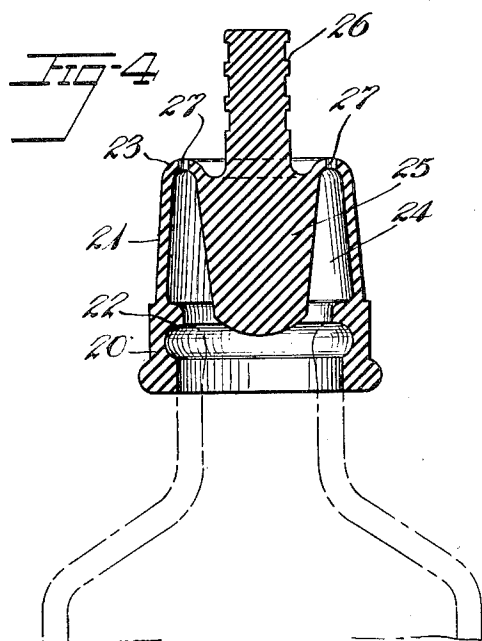
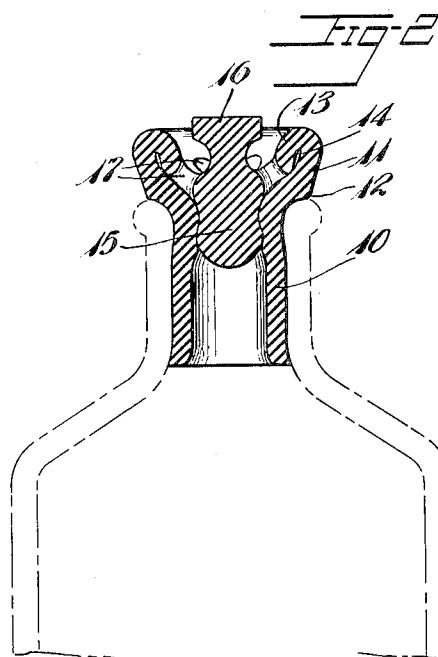
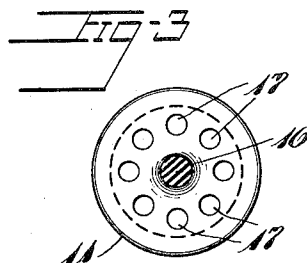
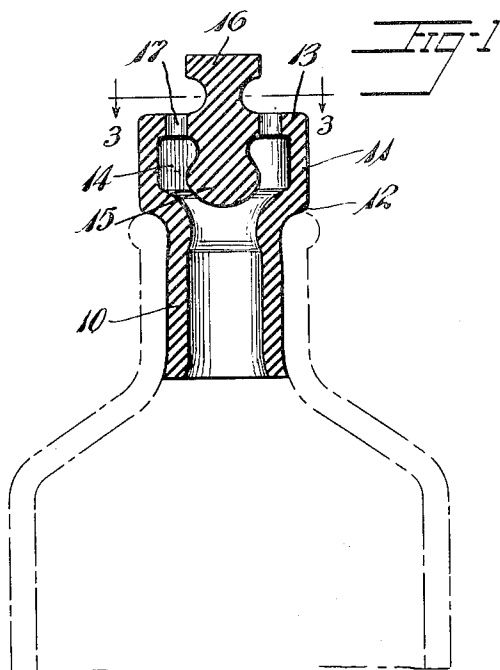
Feb. 27, 1934.

C. W. LEGUILLON

1,949,058

DISPENSING BOTTLE STOPPER

Filed Sept. 29, 1932



INVENTOR
Charles W. Leguillon
By Edwin & Avery
Attys.

UNITED STATES PATENT OFFICE

1,949,058

DISPENSING BOTTLE STOPPER

Charles W. Leguillon, Akron, Ohio, assignor to
The B. F. Goodrich Company, New York, N. Y.,
a corporation of New York

Application September 29, 1932
Serial No. 635,352

4 Claims. (Cl. 215-74)

This invention relates to dispensing bottle stoppers.

The principal objects of the invention are to provide a sanitary one piece article which may be manufactured from an elastic composition at a minimum cost, which may be easily cleaned, which will be resistant to the action of corrosive fluids, which will readily conform to bottles of varying dimensions, and will prevent contamination of the liquid contained in the bottle.

Other objects will appear from the following description and the accompanying drawing.

In the drawing:

Fig. 1 is a sectional elevation of one form of the device in its dispensing position, the bottle being indicated by dot and dash lines.

Fig. 2 is a similar view showing the device in sealing position.

Fig. 3 is a sectional plan of the device taken on line 3-3 of Fig. 1.

Fig. 4 is a sectional elevation of another form of the device shown in dispensing position.

Referring to the drawing, and particularly to Figs. 1 to 3, the stopper comprises a tubular portion 10 adapted to engage the neck of the bottle, by being inserted therein under slight compression. A tubular flexible extension 11 of the device which is offset from the portion 10 to provide a shoulder 12, together with an end wall 13 defines a chamber 14 extending above the neck of the bottle. The end wall 13 is provided with a downwardly extending stopper portion 15 and an upwardly extending knob 16 concentric with the portion 10 and preferably formed integrally with the wall 13.

A plurality of dispensing apertures 17 are formed through the wall 13 around the knob 16.

In the form shown in Fig. 4 a tubular portion 20 is adapted to engage the neck of the bottle by being stretched thereover. A tubular flexible extension 21 extends above the neck of the bottle and terminates in an end wall 23 defining a chamber 24. A shoulder 22 is provided at the juncture of the portions 20 and 21 to limit the engagement of the device over the neck of the bottle. A stopper portion 25 adapted to close the neck of the bottle extends downwardly from the end wall 23 in alignment with the bottle neck and a knob 26 extends above the wall 23, the stopper portion and knob preferably being formed integrally with the other parts of the device.

A plurality of dispensing apertures 27 are formed through the end wall 23 around the knob 26.

In both forms of the device, when the knob portion of the device is depressed toward the bottle, the stopper portion seals the neck and prevents escape of fluid, the chamber walls being telescoped by this movement. When the knob portion is drawn away from the neck, the stopper portion is withdrawn and the chamber portion assumes its normal position. In this position the fluid may be discharged from the apertures in the end wall by shaking the bottle or by inverting the bottle and pressing the knob portion toward the neck. When using the latter method depressing of the knob to sealing position will cause the discharge of a measured amount of fluid depending upon the capacity of the chamber which may be proportioned as desired.

As the stopper portion is permanently attached to the chamber portion, and is always contained therein, danger of contamination of the stopper portion is avoided.

Either form of the device may be permanently attached to the bottle if desired by cementing to the bottle or otherwise. In the form shown in Figs. 1 to 3 the insertion of the stopper portion 15 into the tubular portion 10 tends to expand the latter into close engagement with the walls of the bottle neck, increasing the frictional engagement of the tubular portion with the neck of the bottle and forcing it to conform to any depressions in the wall thereof.

The entire device may be molded from rubber or other flexible and resilient compounds resistant to liquids.

I claim:

1. A dispensing stopper comprising a resilient tubular member adapted to engage the neck of a bottle and having a flexible bulb thereabove forming a chamber apertured to dispense a liquid, and a stopper attached to the flexible bulb in alignment with the neck of the bottle but normally out of contact therewith and adapted to seal the bottle by telescoping of the chamber walls.
2. A dispensing stopper comprising a resilient tubular member adapted to engage the neck of the bottle and having a flexible bulb thereabove forming a chamber apertured to dispense a liquid, a stopper attached to the flexible bulb in alignment with the neck of the bottle but normally out of contact therewith and adapted to seal the bottle by compressing of the bulb, and means external of said bulb for compressing the same.
3. A dispensing stopper comprising a resilient tubular member adapted to enter the neck of a bottle and frictionally to engage the same and

having a flexible bulb connected thereto above the neck of the bottle and apertured to dispense a liquid, and a stopper member integral with the wall of said bulb and adapted to enter said tubular member to seal the bottle when the walls of the bulb are flexed from their normal position by pressure from without.

4. A dispensing stopper comprising a resilient tubular member adapted to be stretched over the

neck of a bottle and frictionally to engage the same and having a flexible bulb thereabove forming a chamber apertured to dispense a liquid, and a stopper member attached to the wall of said bulb within the neck and adapted to seal the neck of the bottle only when the walls of said bulb are flexed.

CHARLES W. LEGUILLON.

10

85

15

90

20

95

25

100

30

105

35

110

40

115

45

120

50

125

55

130

60

135

65

140

70

145

75

150