Nov. 22, 1960 M. SKAIST 2,961,167

CONTROLLED EVAPORABLE DEODORANT BOTTLE

Filed Oct. 29, 1958

Fig. 1

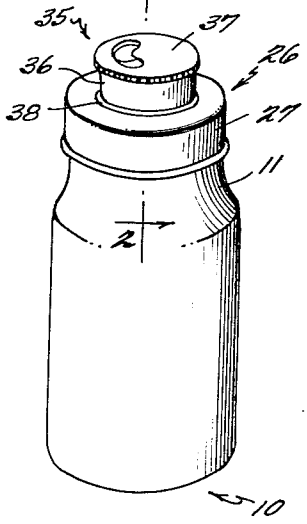


Fig. 2

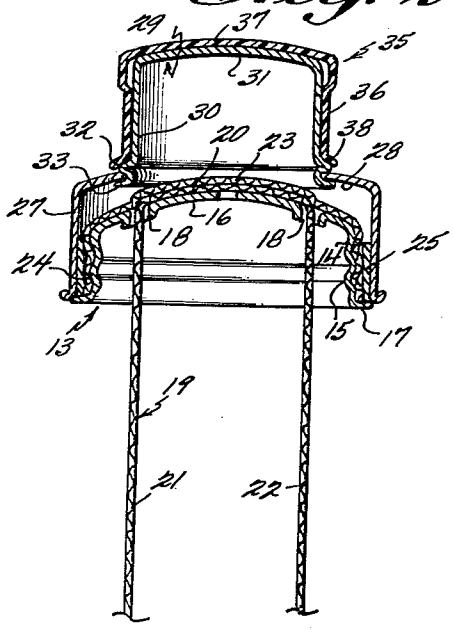
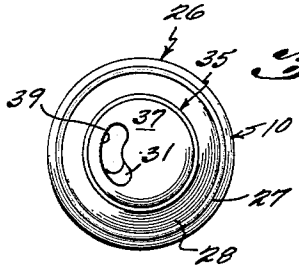


Fig. 3



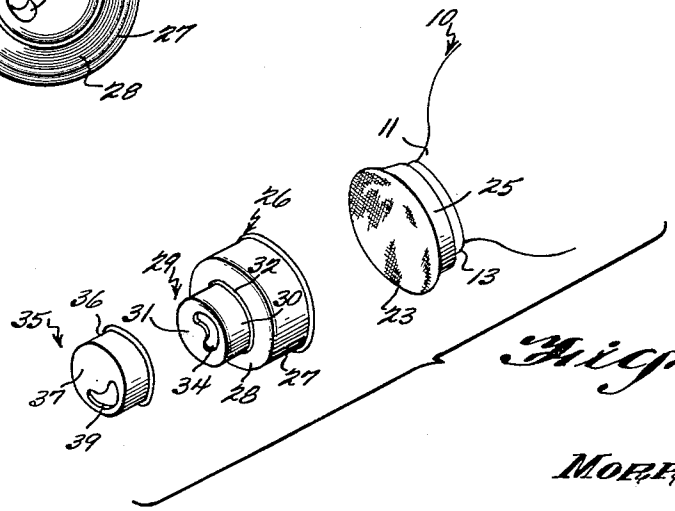


Fig. 4

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CONTROLLED EVAPORABLE DEODORANT BOTTLE

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1 Claim. (Cl. 239—45)

The present invention relates to controlled evaporable deodorant bottles and is an improvement on my Evaporable Deodorant Bottle, Patent 2,787,496 issued April 2, 1957.

The primary object of the invention is to provide an evaporable deodorant bottle in which the rate of evaporation can be minutely controlled.

Another object of the invention is to provide an evaporable deodorant bottle in which the evaporation control elements can be quickly and easily adjusted to vary the rate of evaporation as required.

A further object of the invention is to provide an evaporable deodorant bottle of the class described above which is inexpensive to manufacture, simple to use and which is effective in providing controlled evaporation through a variety of adjustments.

Other objects and advantages will become apparent in the following specification when considered in the light of the attached drawings, in which:

Figure 1 is a perspective view of the invention;

Figure 2 is an enlarged fragmentary vertical section taken along the line 2—2 of Figure 1, looking in the direction of the arrows with the bottle removed;

Figure 3 is a top plan view of the invention; and

Figure 4 is a fragmentary exploded perspective view of the invention with the bottle broken away for convenience of illustration.

Referring now to the drawings in detail wherein like reference characters indicate like parts throughout the several figures, the reference numeral **10** indicates generally a controlled evaporable deodorant bottle constructed in accordance with the invention.

The bottle **10** in use contains a deodorizing liquid material and has an externally threaded conventional neck **11** formed integrally thereon.

A metallic cap **13** is provided with a cylindrical side wall **14** having internal screw threads **15** formed therein. A circular disk wall **16** is formed integrally with the cylindrical side wall **14** and extends across the upper end thereof. The cap **13** is provided with an externally flaring lip **17** around the peripheral free edge thereof opposite the wall **16**.

The wall **16** of the cap **13** is provided with a pair of spaced apertures **18** through which is threaded a wick **19** so that a portion **20** thereof will overlie the cap **13** between the apertures **18**, as best seen in Figure 2. The wick **19** has depending spaced leg portions **22, 22** which extend into the bottle **10** when the cap **13** is in position on the neck **11** with the screw threads **15** threaded thereon.

A cloth disk **23** is centrally positioned over the cap **13** and has the peripheral edge portion **24** thereof brought downwardly into contact with the outer face of the cylindrical wall **14** of the cap **13**, terminating adjacent the lip **17**, as best shown in Figure 2.

The cloth disk **23** is arranged in contact with the portion **20** of the wick **19** so that fluid may flow therebetween

by capillary action. A band **25** of annular form is positioned in contact with the peripheral edge portion **24** of the cloth disk **23** so as to clamp the cloth disk **23** to the cap **13**, as best seen in Figure 2.

A cap, generally indicated at **26**, is provided with a cylindrical side wall **27** and a top wall **28**. The cap **26** is adapted to be positioned over the cap **13** with the cylindrical side wall **27** in contact with the band **25** to seal the cloth disk **23** and wick **19** from the atmosphere.

The top wall **28** has a central opening formed therein to receive an upstanding cylindrical member **29**. The cylindrical member **29** has a circular side wall **30** and a top wall **31** integrally formed thereon. An annular bead **32** is formed in the circular side wall **30** remote from the top wall **31** to engage against the upper edge of the top wall **28**. The circular wall **30** is flared outwardly at **33** to engage under the top wall **28** securing the cylindrical member **29** tightly to the cap **26**. The top wall **31** of the cylindrical member **29** is provided with a sector shaped opening **34** extending therethrough.

An adjustable closure **35** is provided with a cylindrical side wall **36** which engages over the side wall **30** and has a top wall **37** in contact with the upper face of the top wall **31**, as can be best seen in Figure 2. The closure **35** has an outwardly flaring lip **38** formed on the lower end of the cylindrical wall **36** to engage the bead **32**.

The top wall **37** is provided with a sector shaped opening **39** having the same shape, size and relative position as the sector shaped opening **34** so as to completely align with the sector shaped opening **34** in one position of rotation of the closure **35** with respect to the cylindrical member **29**. The degree of alignment of the sector shaped opening **39** with the sector shaped opening **34** can be controlled by rotary movement of the closure **35** with respect to the cylindrical member **29** and the size of the sector shaped openings **34, 39** is such that in one position of adjustment of the closure **35** with respect to the cylindrical member **29**, the openings **34, 39** are completely out of alignment, sealing off the cloth disk **23** and wick **19** from the atmosphere.

In the use and operation of the invention, a highly concentrated, slowly evaporating deodorant liquid is placed in the bottle **10** and the cap **13** with depending wick **19** is fastened thereon with the wick **19** immersed in the deodorant liquid. Cap **26**, with the openings **34, 39** out of alignment, is engaged over the cap **13** to seal the bottle **10** for shipping purposes and during periods when the deodorant is not needed.

The wick **19** through the portion **20** thereof will maintain the cloth disk **23** in a wet condition. The surface of the cloth disk **23** is of sufficient size to provide a considerable area of evaporation so that the effectiveness of the device will be very great.

When the amount of evaporation from the disk **23** is too great, the closure **35** is rotated on the cylindrical member **29** to reduce the effectiveness of the openings **34, 39** until the amount of evaporation is reduced to the desired point.

Having thus described the preferred embodiment of the invention, it should be understood that numerous structural modifications and adaptations may be resorted to without departing from the scope of the appended claim.

What is claimed is:

An evaporable deodorant dispensing device comprising a liquid deodorant containing receptacle of the type having an externally threaded neck, an internally threaded cylindrical metallic wall adapted for cooperation with the threads of said neck, an annular flange on said cylindrical metallic wall, an upwardly convexed metallic wall extending across one end of said cylindrical wall

and integrally joined thereto, said last named wall having a pair of spaced apertures extending therethrough, a wick threaded through said apertures with depending opposite end portions extending into said receptacle, a cloth disk overlying said last named wall and said cylindrical wall in contact with said disk, an annular band clamping said cloth disk to said cylindrical wall, a cap engaged over said cloth disk and said band, said cap comprising a cylindrical side wall closely engaging said annular band, a bead at the bottom edge of said side wall engaging said annular flange on said cylindrical metallic wall and a top wall having a centrally positioned opening therein, a cylindrical member of lesser diameter than said cap and having a side wall with a concaved bottom bead, said bead engaging the rim of said opening, secured to said cap and extending upwardly therefrom, a top wall integrally secured to said cylindrical member at the end thereof opposite said cap, a closure member having an outwardly offset knurled rim and an arcuate flange seating against said concaved bead, rotatably supported on

said cylindrical member, a top wall integrally formed on said closure member and contacting the top wall of said cylindrical member, said top wall of said cylindrical member and said top wall of said closure member each having a sector shaped opening which may be aligned on turning movement of said closure member with respect to said cylindrical member.

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