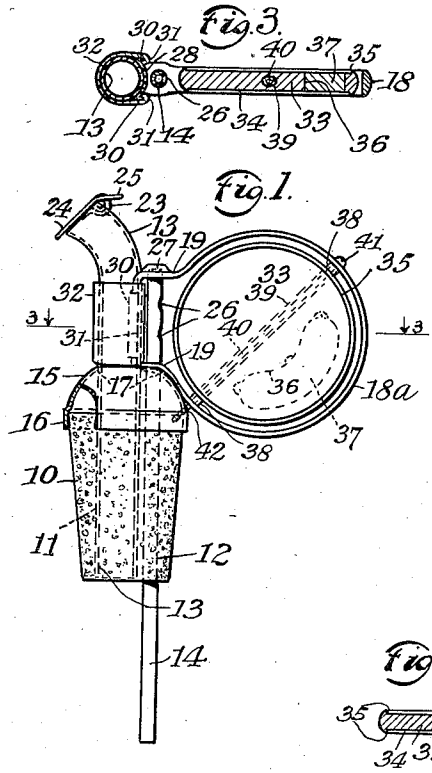
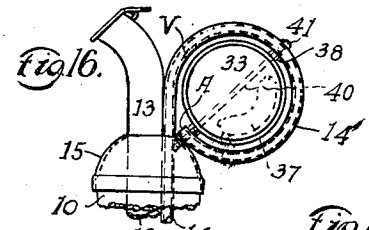
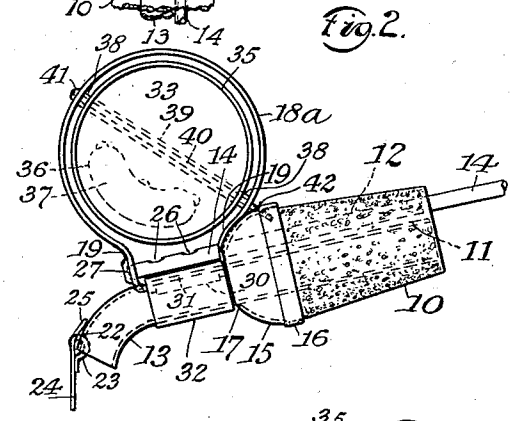
May 26, 1936. L. R. PAUL 2,041,724

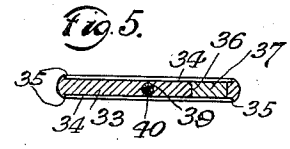
SWIVEL SIGN POURING CLOSURE

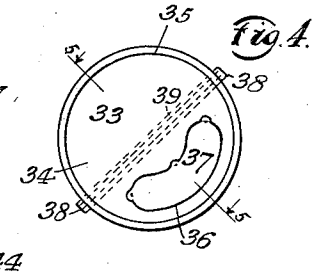
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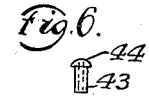


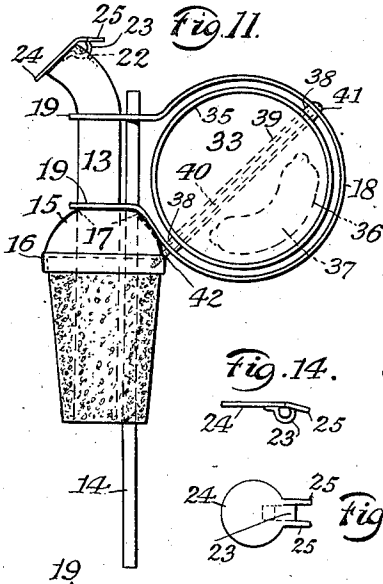


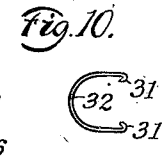


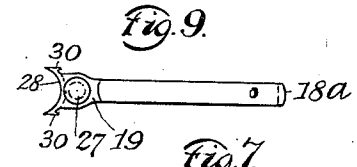


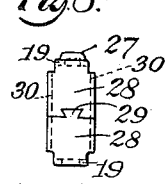


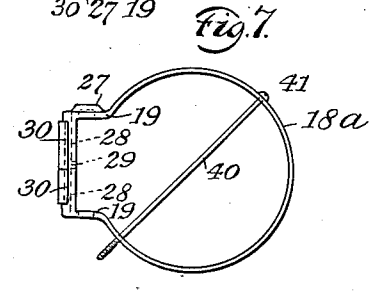


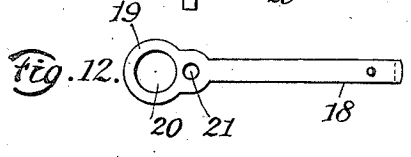


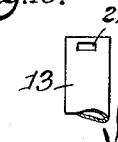












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2,041,724

SWIVEL SIGN POURING CLOSURE

Leon R. Paul, Brooklyn, N. Y.

Application May 21, 1935, Serial No. 22,540

12 Claims. (Cl. 215—79)

The invention relates to dispensing stoppers for temporary use in bottles and other containers during the delivery of its contents in interval pourings therefrom.

The dispensing stopper, as a whole, includes a cork to which a metallic superstructure is attached, and through which cork a pouring tube and a vent tube project, the vent tube extending downwardly into the bottle for a distance approximately the length of the cork, so that free pouring of the bottle's contents is achieved.

An important feature of the invention resides in a circularly looped frame within which a display disk is swiveled; a weight preferably embedded in the disk serving to control the position thereof so that a picture, emblem or printed matter carried on the side faces of the disk will be disclosed to an observer in an upright, or readable position, when the bottle is tilted or moved to a pouring angle; this gravitationally induced swinging movement of the disk is accomplished by providing a supporting swivel-pin or the like extending through the looped frame and disk and threaded into a metal cap on the upper part of the cork.

A further feature, to reduce cost of production, is to provide extensions of the looped frame with suitable orifices for receiving the pouring and vent tubes for effecting direct connection with said frame.

In the drawing,

Fig. 1 is a side elevation, partly in section of one form of the invention with the parts in normal position;

Fig. 2 is a side elevation showing the stopper tilted to the dispensing position with the positions of a valve and disk member changed accordingly;

Fig. 3 is a horizontal section taken about on the line 3—3 of Fig. 1;

Fig. 4 is a face view of a display disk member carrying a controlling weight at one side of its swinging center;

Fig. 5 is a sectional view of the disk taken on the line 5—5 of Fig. 4;

Fig. 6 is a detail of a headed spacing or bearing sleeve which may be employed;

Fig. 7 is a detail view of one form of a disk supporting frame and a diagonally extending pin on which the disk may be swiveled;

Fig. 8 is a detail of construction showing interlocking parts of the disk supporting frame;

Fig. 9 is a top view of the disk supporting frame;

Fig. 10 is a top view of a yoke member coacting with a part of the said frame for firmly attaching it to the pouring tube of the stopper;

Fig. 11 is a side elevation of the preferred form of dispensing stopper of a more simplified construction;

Fig. 12 is a detail top view of the frame for supporting a swiveled display disk;

Fig. 13 is a detail of the upper end of the pouring spout provided with an open slot;

Fig. 14 is a detail edge view of a valve connected to swing around said slot; and

Fig. 15 is a detail top view of the valve.

In the drawing, 10 is a cork provided with a longitudinal bore 11, and a smaller laterally aligned bore 12, through which a pouring tube 13 and a vent tube 14 respectively, are passed and held in determined projective positions by frictional contact with the cork walls of the bores. A metal cap 15 has a depending skirt or flange 16 which has a driving fit over the top of the cork 10 and the cap also has orifices 17 which correspond to and register with the bores 11 and 12 through the cork 10.

In Fig. 11 of the drawing a circular loop or frame 18, has terminal parallel arms or extensions 19, in which are orifies 20 and 21 through which the respective flow and vent tubes 13 and 14 are projected in a tight fit, to permanently interlock the tubes and frame 18.

In the top portion of the pouring tube 13, is a cross slot 22, of a size to receive a tongue 23, bent into a loop and back under a swinging gate or valve 24, and stop fingers 25, project from the valve at opposite sides of the looped tongue, for limiting the downward and outward swing of the gate 24, as shown in Fig. 2 of the drawing.

In Fig. 11, the vent tube 14, is open from top to bottom, while the vent tube 14, of Figs. 1 and 2 has side openings as at 26, and is closed at the upper end by the floor of a socket 27, formed in the upper arm 19 of the circular frame 18a.

The means employed for permanently connecting the circular frame 18a of Fig. 1, to the pouring tube 13, consists in forming the terminals of the arms 19 into cross-curved plates 28, connected by a tongue and groove joint 29 (Figs. 7 and 8) said curved plates being bent back to provide opposite hook flanges 30 adapted for interlocking engagement with oppositely bent hooks 31, carried on the terminals of a yoke-strap 32.

A display disk 33, is preferably made of light material such as wood and has depressed side faces 34, surrounded by circumferential flanges 35, within which disks of printed or pictured

paper or cardboard may be set by paste for advertising a product or for other purposes.

Approximating in thickness the wooden body of the disk **33**, and confined within an opening **36** therein, is a lead or other weight **37**, and passing centrally through the plane of the disk body, with its ends projecting to provide spacing means **38**, is a bearing tube **39**, having a bore for the free bearing of a swivel pin **40**, which has a screw head **41** bearing on the upper reach of the looped frame and having threads at its lower end to engage a threaded aperture **42** in the metal cork cap **15**.

In Fig. 6 there is shown a short sleeve **43** having a spacing head **44**, and two of these headed sleeves may be employed instead of the tube **39**, by introducing the tubes into either end of the bore through the disk, the heads **44** acting as spacers instead of the tube extensions **38**.

In Fig. 16 there is disclosed a modified form of swiveled display disk and supporting structure, in which like parts have like indices as for the previous figures. This view is partially fragmented for convenience.

In this latter modification the vent tube **14** is brought up and is extended in a circle **14'** until its lower vented end A contacts with the cork ferrule **15** and is affixed thereto, thus forming a circular loop in which the advertising disk **33**, somewhat smaller on its external diameter, than the inside diameter of the vent loop **14'**, is pivotally mounted, as in Figs. 1, 2 and 11, to operate as described for these figures. The mounting of the pivot **40** is as previously described for the other figures, except that the pivot structure passes through the vent loop and the terminal end of the pivot pin **40** passes through the vent loop foot at A. A vent hole V, may be located in the tube as disclosed in Fig. 16. This latter structure is simple and economical to manufacture.

What I claim is:

1. A dispensing stopper for bottles comprising a cork, a flow tube, and a vent tube, said tubes projecting through the cork; a single piece frame including extensions having orifices for receiving the pouring and vent tubes respectively in interlocked relation with said frame and a display device swiveled in said frame.

2. A dispensing stopper comprising a cork; a pouring tube and a vent tube extended therethrough; a looped frame connected to said tubes; a disk swiveled in said frame and means for automatically controlling the swinging position of the disk when the stoppered bottle is tilted to dispense fluid therefrom.

3. A dispensing device comprising in combination, a stopper; a flow tube and a vent tube associated therewith; a circular frame having outturned parallel arms through which said tubes project and a gravitationally controlled member swiveled within said frame.

4. A dispensing device comprising a stopper; a flow tube and a vent tube associated therewith; a looped frame having turned out parallel arms, means for connecting the arms to said tubes; a disk swiveled within said frame and a weight confined within said disk for controlling its position in the dispensing operation of said device.

5. A dispensing device comprising a bottle stopper; a flow tube; means for venting said bottle; a frame; interlocking means for connecting the frame to the pouring and venting means; a display disk; a tube extending through the diametrical axis of said disk and extended at both ends to contact the inner face of said frame; a pin extending through the frame and tube and threaded into said stopper for providing a swiveling axis for said disk; and a weight in said disk for controlling its position.

6. A dispensing device for bottles, comprising in combination, a stopper; a pouring tube and a vent tube; a gate pivoted to the top of the pouring tube and normally closing said tube; means on said gate for limiting its outward swing when pouring; a frame supported on said tubes; a disk swiveled within said frame on an axis aslant to the vertical; and means within said disk for controlling its position with respect to said axis.

7. A dispensing device, comprising a cork, a metal cap thereon; tubes extending through the cork; a frame having spaced outwardly turned extensions formed at their ends with respective male and female portions for forming an interlocking joint, said ends being further formed with aligned curved faces and side hooks; a yoke-strap having turned in ends for interlocking engagement with the said side hooks for connecting one of said tubes to the frame and means for connecting the other of tubes to said frame.

8. A dispensing device comprising a stopper, pouring and venting means associated with said stopper; a frame connected to the pouring and venting means and a display device mounted to gravitationally rotate axially within said frame.

9. A dispensing device for bottles comprising a bottle stopper; means for pouring and venting through said stopper; a circular frame connected to said pouring and venting means; a display disk; and means for mounting said disk in spaced, swiveled and gravitationally movable relation within said frame.

10. A dispensing device for bottles comprising a stopper; a pouring and a vent tube passing therethrough; a frame connected to said tubes; a display disk; a weight within said disk, said disk having a radial bore passing therethrough; bearing sleeves within the ends of the bore and having spacing heads contacting the inner face of the frame; and a headed pin extending through the upper portion of the frame and downwardly at an angle to the vertical through said sleeves and bore and into top of the stopper.

11. A dispensing stopper comprising a cork, a pouring tube and a vent tube extended through said cork, said vent tube being formed into a loop frame with its extended and looped ends connected to said cork and an advertising disk mounted to gravitationally swivel in said loop.

12. A dispensing stopper comprising a cork, a pouring tube and a vent tube extending through said cork, a gravitationally controlled disk, and means associated with said stopper for pivotally supporting said disk for gravitational rotation.

LEON R. PAUL.