Feb. 1, 1955 E. W. BOWMAN 2,701,078

DISPENSING CAP FOR OIL BOTTLES AND THE LIKE

Filed Jan. 10, 1951

Fig. 1.

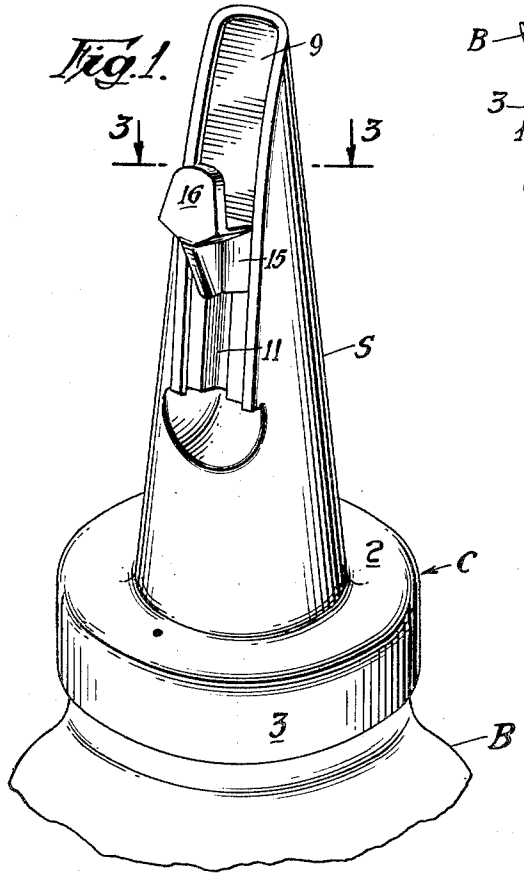


Fig. 2.

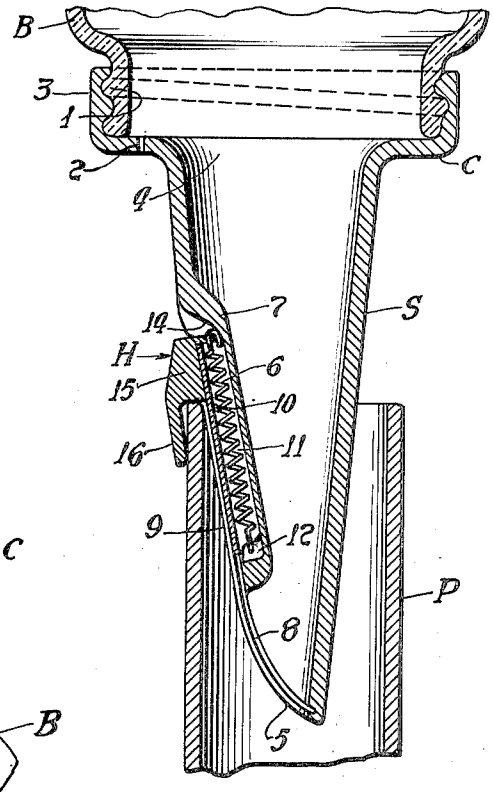
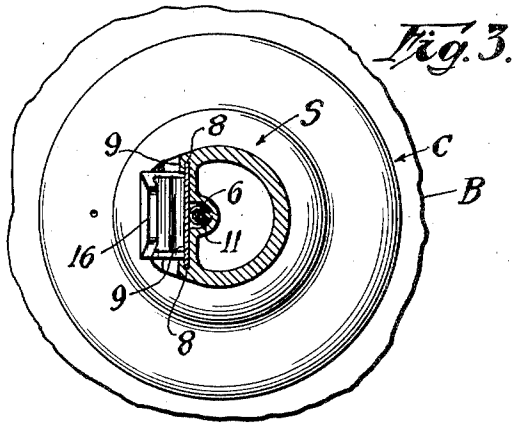


Fig. 3.



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United States Patent Office 2,701,078 Patented Feb. 1, 1955

2,701,078

DISPENSING CAP FOR OIL BOTTLES AND THE LIKE

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Application January 10, 1951, Serial No. 205,360
2 Claims. (Cl. 222—117)

This invention relates to a dispensing cap for oil bottles and the like and it is an object of the invention to provide a cap having a normally closed discharge opening but which is maintained open when the bottle is in pouring position.

It is now a common practice to package engine oil for automobiles in bottles of one quart capacity and to place the filled bottles in racks at garages, filling stations and kindred places for ready accessibility.

It is a purpose of the invention to provide caps for bottles of this kind to facilitate the pouring of the oil from the bottles into the oil pipe of a vehicle.

Furthermore, it is an object of the invention to provide a cap of the kind including a pouring spout having its discharge opening in the side wall of the spout together with a valve element normally maintaining closed said discharge opening and wherein the valve member is provided with means for suspending the bottle and applied cap in an inverted pouring position and in a manner whereby the weight of the cap and bottles will hold the valve member in open position.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved dispensing cap for oil bottles and the like whereby certain advantages are attained, as will be hereinafter more fully set forth.

In order that my invention may be better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:

Figure 1 is a view in perspective of a dispensing cap constructed in accordance with an embodiment of the invention and in applied position upon a bottle shown in fragment, said bottle and cap being in an upright position;

Figure 2 is a sectional view taken longitudinally through Figure 1, with the cap and bottle inverted and in operative engagement with the outer end portion of the filling pipe shown in fragment; and

Figure 3 is a sectional view taken substantially on line 3—3 of Fig. 1 of the drawings, looking in the direction of the arrows.

In the accompanying drawings, B denotes a bottle of a type now commonly employed in the commercial exploitation of engine oil to motorists and with which is operatively engaged the neck 1 and cap C constructed in accordance with an embodiment of the invention.

The cap C includes a head 2 having a surrounding marginal flange 3 which threads upon the neck 1 of the bottle B. The central portion of the head 2 is provided with a relatively large opening 4 affording communication with the interior of the elongated spout S surrounding the opening 4 and rigid with the head 2.

The spout S is of a tapered type and is provided at its outer or apex portion with a longitudinally disposed elongated discharge opening 5. Immediately adjacent to the inner end of the opening 5 and extending inwardly along the spout S is a channel 6 of considerable length. The portion of the wall of the spout S in which this channel is formed is inwardly thickened, as at 7, to allow for said channel 6.

The opposed faces of the spout S adjacent to the free edges of the walls along the opening 5, are provided with the guide or track grooves 8. These grooves are continued along such opposed faces on opposite sides and for the length of the channel 6. In these guide or track grooves 8 are engaged the longitudinal marginal portions of a flexible valve member 9 in the form of a thin flat tongue which, when in its outermost position of adjustment, closes the opening 5.

The valve 9 is normally maintained in its normally closed position by a traction member 10 of desired tension and which is herein disclosed as a coiled spring.

The member or spring 10 is housed within the channel 6 in the wall of the spout S. This channel 6 extends lengthwise of the spout S from a point closely adjacent to the opening 5 for a material distance along the spout S. Within the outer end portion of the channel 6 is a rigid lug 12 to which is anchored one extremity of the traction member or spring 10 while the opposite extremity of said spring or member 10 is anchored to the lug 14.

The inner end portion of the valve member 9 has rigid therewith the outwardly directed hook member H including a head or block 15 directly secured to the valve member 9 and a bill 16 disposed in spaced relation with the outer side of the valve member 9. The lug 14 is carried by the block 15, as shown.

The member or spring 10 normally maintains the valve member 9 in closed position. The hook member H serves as a handle whereby the valve member 9 may be manually shifted into open position when desired but when the spout S is inserted into the oil filler pipe P (Figure 2) the hook member H engages the wall of the pipe P to suspend the cap C and its associated bottle or container B in pouring position. The weight of the cap C and bottle or container B is sufficient to overcome the tension or resistance of the member or spring 10 whereby the valve member 9 is shifted into open position and maintained in such adjustment until the cap C and bottle or container B are removed.

From the foregoing description it is thought to be obvious that a dispensing cap for oil bottles and the like constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated.

I claim:

1. A pouring device for securement over an outlet of a receptacle, said device comprising an elongate spout having an outer or pouring end and having a longitudinally extending outlet opening in the side wall thereof and extending from the outer end inwards, means at the inner end of the spout for securing the spout over a receptacle outlet, said side wall having an elongate laterally opening channel formed longitudinally therein and extending from the inner end of said opening toward the inner end of the spout, guide grooves formed along opposite sides of said opening and lengthwise of said channel on opposite sides of the latter, an elongate flat flexible tongue forming a valve member having its opposite longitudinal edges slidably engaged in said guide grooves, said tongue being movable toward the outer end of the spout to a forward position in which it closes said opening and toward the inner end of the spout to a position in which it overlies the channel and uncovers the opening, a traction spring housed in said channel and secured at one end in the outer end of the channel, means securing the other end of the spring to the inner end of the tongue, said spring normally urging forward movement of the tongue outwardly to closed position over the opening, and a handle element secured to the said inner end of the tongue and including a hook bill positioned for engagement over an end edge of a tube into which the said one end of the spout is inserted.

2. The invention according to claim 1, wherein said spout is of conical form and said outlet opening is extended across the apex portion of the spout, the said side wall of the spout having an elongate longitudinally extending and thickened portion on the inner side thereof in which said laterally opening channel is located.

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