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[54] **COMBINATION FUNNEL AND CAN OPENER**
2 Claims, 4 Drawing Figs.

[52] U.S. Cl. 222/88
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 [50] Field of Search 222/81, 82,
 83.5, 86, 88, 89, 90

ABSTRACT: A one-piece funnel having a bowl portion and a hollow spout portion projecting therefrom, an integral boss on the interior of said bowl portion adjacent said spout portion and an opener blade having its base embedded in said boss, said opener having a hook portion formed adjacent said boss for engagement with the rim of a can to be opened.

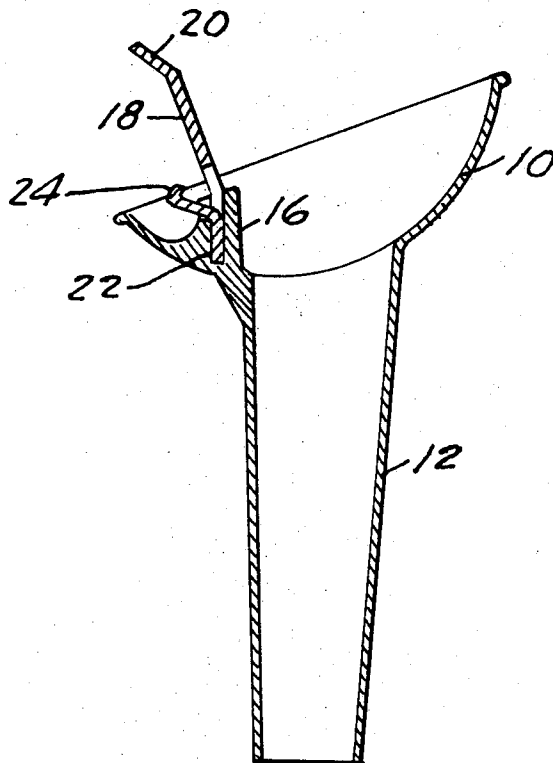


FIG. 1.

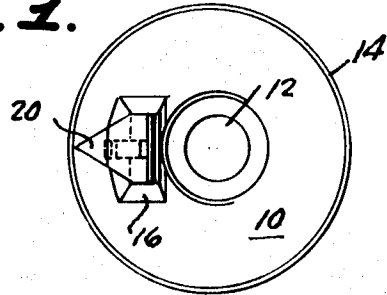


FIG. 2.

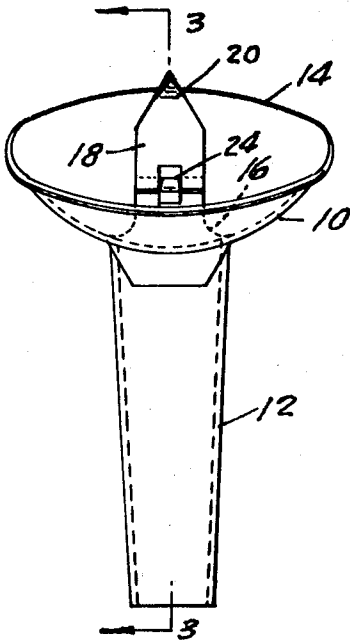


FIG. 3.

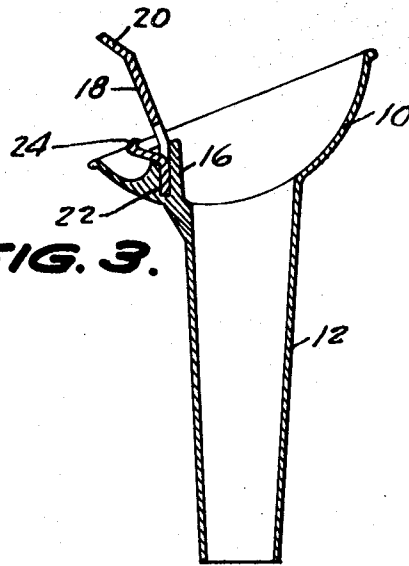
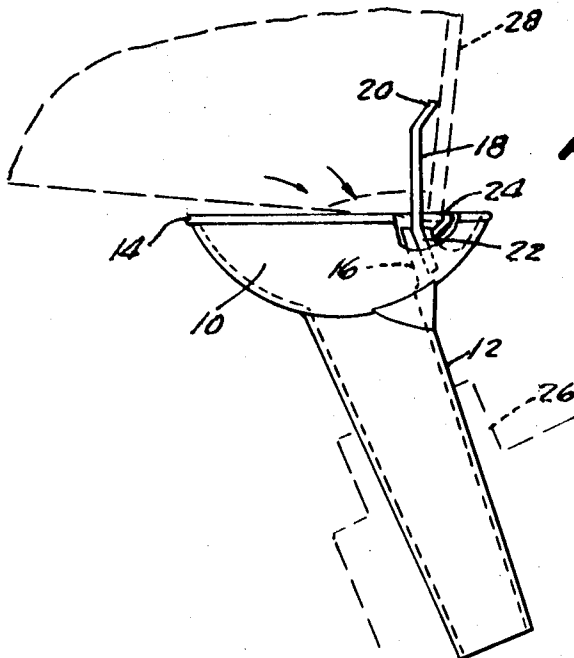


FIG. 4.



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COMBINATION FUNNEL AND CAN OPENER

It is an object of this invention to provide a combination funnel and can opener in which the funnel spout may be inserted into the breather pipe of a car needing additional oil and the can may then be placed in the bowl portion of the funnel and rotated with automatic piercing of the can and subsequent drainage of its contents through the spout portion into the crankcase of the car.

This is a distinct departure from and improvement upon the conventional opener which is simply a wide mouth spout containing an upwardly projecting blade. In current practice, such a spout-opener is pressed down on top of the can forming a considerable gash in the top cylindrical surface so that when the can with a spout attached is inverted and the spout thrust into the breather pipe the oil will flow into the crankcase. This procedure, however, has to be repeated for each can of oil required by the car and there is considerable opportunity for drip and spillage at each such operation.

The present invention overcomes all those difficulties in the following manner:

- a. the funnel opener combination has the spout portion inserted in the breather pipe before the can is applied;
- b. the arrangement provides leverage to assist the operator in piercing the can;
- c. minimum effort is required to move a spent can from the device; and
- d. cans may be repeatedly opened and emptied while the device remains in position in the breather pipe.

Obviously, with such an arrangement, the opportunities for drip and spillage are minimized and far fewer movements are required on the part of the filling station attendant in adding oil. This is particularly advantageous when refilling automatic transmissions which frequently require two to four cans at a time.

The above and other objects will be made clear from the following detailed description taken in connection with the annexed drawing, in which:

FIG. 1 is a plan view of the improved device;

FIG. 2 is a perspective elevation of the device;

FIG. 3 is a section on the line 3-3 of FIG. 2; and

FIG. 4 is a side elevation illustrating the actual use of the device.

Referring now particularly to FIGS. 2 and 3, the improved combination funnel and can opener will be seen to comprise a bowl portion 10 and a spout portion 12. The bowl portion 10 has a rim 14 which lies in a plane at an angle to the axis of the spout portion 12 for a purpose presently to be described. A boss 16 is formed in the bowl portion 10 adjacent its merger with the spout 12. Preferably, the bowl and the spout are integral and are formed by conventional diecasting procedures. They could be formed, of course, by powdered metal, molding and sintering but conventional diecasting is preferred. A can

opener 18 is handled as an insert during the diecasting procedure so that the final product is essentially a one-piece unit. The opener 18 is quite similar to a conventional beer can opener and includes a pointed extremity 20, a lower embedded extremity 22 and a can lip engaging tongue 24 struck out of the opener 18.

The use of this device is illustrated in FIG. 4, where the spout 12 is shown inserted into a breather pipe 26 shown in dotted outline. The device is rotated until the flange 14 assumes a roughly horizontal position or at any rate until the opener 18 with its tongue 24 is conveniently presented. A can 28, also shown in dotted outline, is originally presented with its axis vertical and the rim of one of its ends is brought into engagement with the hook-shaped tongue 24. The can is thereafter rotated to the position indicated in dotted outlines in FIG. 4 which results in the point 20 rupturing the sidewall of the can to provide a considerable opening. As shown in FIG. 4, this opening provides a natural drainage point into the bowl 10, thence through the spout 12 into the breather pipe or other orifice 26 with no possibility of spillage or dripping. The device 10-12 remains in place while the emptied can is removed and another is put through the same treatment. Drip-page and spilling are thoroughly avoided and it is unnecessary to remove the bowl and spout combination until the filling operation is complete. This is in sharp distinction to current practice.

Since diecasting, by its nature, requires the use of noncorrodible alloys and the opener 18 may be made of stainless steel, the entire unit is rust and corrosion proof.

No doubt, certain modifications and structural detail will suggest themselves to one skilled in the art who peruses this application and it is not intended, therefore, to limit this invention to the precise details disclosed herein.

I claim:

1. An integral die-cast one-piece funnel having a bowl and a hollow spout projecting therefrom, a rim on said bowl lying in a single plane, the axis of said spout extending at an acute angle to said plane, a boss integrally formed on the interior of said bowl adjacent said spout within the acute angle between said axis and said plane, said boss extending upwardly within said bowl toward said plane terminating short of said plane, and a one-piece opener blade having its base rigidly embedded in said boss as an insert, said opener blade having a sharpened cutting point formed on its free end and a hook integrally formed thereon intermediate said cutting point and the base of said opener blade for engagement with the rim of a can to be opened.

2. A device as claimed in claim 1 wherein said opener blade is formed from a flat metal bar including a central portion having the cutting point integrally formed thereon and extending angularly therefrom, the base extending angularly from the central portion, and said hook being struck out of the bar at the juncture of said base and said central portion.

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