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FILLER CAN

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FIG. 1

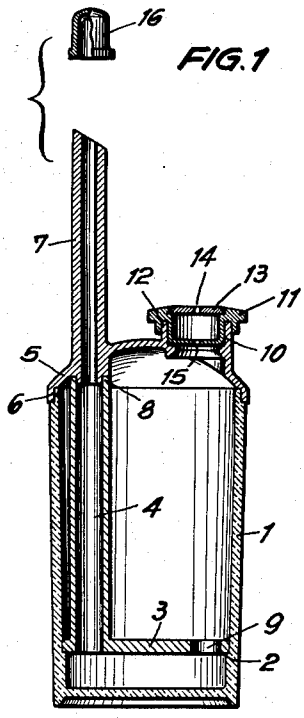


FIG. 2

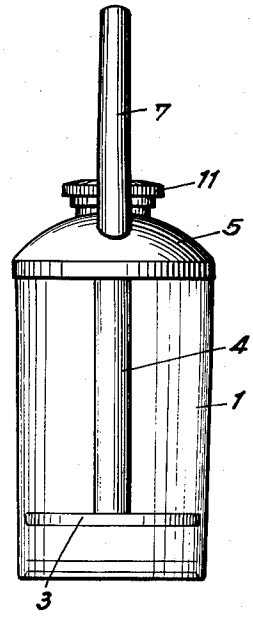
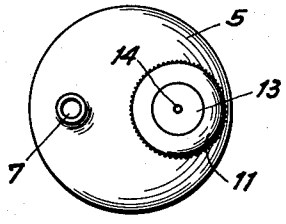


FIG. 3



INVENTOR:
KARL HENTSCHKE
WILHELM LYNKER
By:

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FILLER CAN

Karl Hentschke, Altena, and Wilhelm Lynker, Carthausen, Germany

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Lamps and stoves burning liquid fuels supplied under air pressure are usually conditioned for ignition by means of a starter cup filled with methylated spirit which, after having been ignited, pre-heats the evaporator of the lamp or stove to the requisite temperature. Such a cup is located below the evaporator and its capacity is such that a single filling suffices to pre-heat the lamp or stove.

Since the starter cup is sometimes located in a position in the lamp or stove to which it is difficult to gain access, filling cans have been devised for filling the starter cup, such filling cans being provided with a narrow pipe or spout affording easy access to the starter cup. With the use of this type of filling can it frequently happens that either too much or too little fuel reaches the starter cup; in the former case the methylated spirit spills over and after its ignition the whole lamp or stove becomes enveloped in flames. In the latter case pre-heating is often insufficient owing to the liquid fuel being ejected through the fuel jet of the lamp or stove which is consequently made dirty or sooty.

To obviate the disadvantages mentioned, filling cans have been designed which have a double bottom with the pipe or spout beginning in the interspace; and when this type of filling can is inclined once, a certain quantity of pre-heating fuel is delivered. It has been found in practical use that these known filling cans have a number of disadvantages. They are made of sheet metal and the double bottom, the spout, the outer shell and the lid have to be soldered. Frequently, parts of the filling can, more especially the double bottom, become corroded due to residues of soldering causing the can to leak and to cease to be useful. However, it is never possible with these cans to ascertain how much fuel is left in them, and as a result, if by shaking the can, liquid is heard slopping inside, it generally consists only of a residue in the interspace within the double bottom, of insufficient quantity for adequate pre-heating.

Attempts to make a filling can of glass have been unsuccessful because it was found impossible to provide a double bottom and a pipe or spout connected with it.

The present invention overcomes the disadvantages of known designs of filling cans by making all or nearly all parts of the filling can of a wholly or partially transparent material, preferably of the synthetic resin type.

The accompanying drawings represent one example of a filling can made according to the invention; Fig. 1 is a side elevational view of the can, Fig. 2 is a front elevational view, and Fig. 3 is a plan view of the can.

In Fig. 1, a substantially cylindrical container body 1 is formed near its lower end with a ledge 2 on which rests a double bottom 3 which is rigidly connected to the container body 1. From the double bottom 3 a pipe 4 leads to a top plate 5 which is connected at 6 to the container body 1. The pipe 4 is rigidly connected to a spout 7 at 8. Furthermore, the double bottom 3 is formed with a hole 9. The top plate 5 has an eccentrically located filler neck 10 having a closure cap 11 with an annular groove 12 which grips the filler neck 10 both internally and externally. The top of the closure cap 11 is covered over by a small disc 13 having an aperture 14, and the cap 11 has formed within it a second aperture 15. The spout 7 can be closed by means of a cap 16.

The manner in which the filling can of the present invention functions is as follows:

The pre-heating fuel inside the container body 1 flows downwards through the hole 9 into the double bottom 3 and fills the interspace between the bottom of the container body 1 and the double bottom 3. When the filling can is inclined over the starter cup of a lamp or stove, the pre-heating fuel flows through the pipes 4 and 7 into the starter cup, the quantity so flowing being that which was contained between the bottom of container body 1 and the double bottom 3. This quantity of fuel is so calibrated that it suffices to pre-heat the lamp or stove concerned. The flow of fuel produces a pressure drop within the container body 1, which is compensated by air flowing through the air apertures 14 and 15 in the closure cap 11. On righting the can again, fuel flows through the bore 9 into the space between the bottom of the container body 1 and the double bottom 3, and the can is again ready for use.

The main advantage of the filling can of the present invention is that at any time it can be seen how much fuel is left in it. It can thus never happen—as is the case with opaque metal filling cans—that too little fuel is poured into the starter cup of a lamp or stove to be pre-heated. A further advantage lies in the fact that corrosion and its attendant faults are obviated. Furthermore, the special design of the closure device, which grips the filler neck internally and externally, provides absolutely tight sealing, the closure cap 11 being made of a softer and more elastic material than the top plate 5, and the annular groove 12 corresponding very closely to the shape of the filler neck 10. Furthermore, the closure cap 11 can be easily and quickly removed and replaced.

The screw caps of hitherto known filling cans require a gasket which is often lost. These gaskets are dispensed with in the design of the present invention. Moreover, the filling can of the present invention is almost unbreakable and is not liable to be dented as are the known filling cans made of light-gauge sheet metal, and consequently the trouble connected with dented cans is obviated.

In addition, the cap 16, which can be pushed on to the spout 7, positively prevents the leakage of the fuel even when the can is upset. In contradistinction to known filling cans the filler opening of the filling can of the invention is located away from the centre so that it is easier to fill this can from a storage vessel because the spout 7 no longer constitutes an obstacle.

Finally, the filling can of the present invention has the advantage that it can be die-stamped with writing, illustrations or figures in the course of its manufacture without such stamping requiring a separate manufacturing stage.

If desired, some parts of the filling can, more especially the spout, can be made of metal.

What we claim is:

1. A dispensing receptacle, comprising in combination, container means formed of transparent synthetic resin material and having a side wall, a closed bottom and an open top, said side wall having an annular ledge spaced from said closed bottom; partition wall means arranged in said container means and supported by said annular edge thereof so as to form above itself a storage compartment and below itself a metering compartment, said partition wall means being formed with an opening connecting said compartments; a tubular conduit member independent of and spaced from said side wall of said container means and arranged therein extending upwardly from said partition wall means above the level of said open top of said

container means, said tubular conduit member communicating through said partition wall means with said metering compartment; and a cover member surrounding said tubular conduit member and closing said open top of said container means, said cover member being formed with a filler opening passing therethrough adapted to be closed by a closure cap.

2. A dispensing receptacle, comprising in combination, container means having a side wall, a closed bottom and an open top said side wall having an annular ledge spaced from said closed bottom; and a combined metering and closure unit partly inserted in said container means closing the same, said unit comprising partition wall means inserted in said container means and supported by said annular ledge thereof so as to form above itself in said container means a storage compartment and below itself a metering compartment, said partition wall means having an opening connecting said compartments, a tubular conduit means including a lower conduit portion and an upper spout portion, said lower conduit portion being integral at its lower end with said partition wall means opening therethrough and communicating with said metering compartment, said spout portion projecting above the open top of said container means when said unit is inserted in said container means, and cover means secured to said tubular conduit member surrounding the same and spaced from said partition wall means a distance substantially equal to the distance between said partition wall means and the open top of said container means so that when said unit is inserted in said container means the open top of said container means is closed by said cover means.

3. A combined metering and closure unit for use in a dispensing container having a side wall, a closed bottom and an open top, the side wall having an annular ledge spaced from the closed bottom, comprising in combination, partition wall means adapted to be inserted in the container and supported by the annular ledge thereof so as to form an upper storage compartment and a lower metering compartment, said partition wall means being formed with an opening connecting the compartments; a tubular conduit means including a conduit portion and a spout portion, said conduit portion being secured at one end to said partition wall means, opening therethrough and communicating, when the unit is inserted in the container, with the metering compartment formed by said partition wall means, and extending upwardly in the container, said spout portion projecting above the open top of the container when the unit is inserted in the container; a cover member integral with said spout portion surrounding the same and spaced from said partition wall means a distance substantially equal to the distance between said partition wall means and the open top of the container and closing the open top of the container when the unit is inserted therein, said cover member being formed with a filler opening and an annular rim portion around said filler opening; and a flexible closure cap fitting on said annular rim portion closing said filler opening in said cover member.

4. A dispensing receptacle, comprising, in combination, container means having a side wall, a closed bottom and an open top, said side wall having an annular ledge spaced from said closed top; a metering unit inserted in said container, said metering unit comprising partition wall means inserted in said container means and supported by said annular ledge thereof so as to form above itself in said container means a storage compartment and below itself a metering compartment, said partition wall means having an opening connecting said compartments, a tubular conduit means extending from said partition wall means upwardly in said container means, said tubular conduit means being integral at the lower end thereof with said partition wall means, opening therethrough, and communicating with said metering compartment; and cover means covering said open end of said container means, said cover means including a spout portion communicating with said tubular conduit means so that when said container means is inverted fluid within said metering compartment may flow out of said container means through said tubular conduit means and said spout portion of said cover means.

5. A dispensing receptacle, comprising, in combination, container means having a side wall, a closed bottom and an open top, said side wall having an annular ledge spaced from said closed top; a metering unit inserted in said container, said metering unit comprising partition wall means inserted in said container means and supported by said annular ledge thereof so as to form above itself in said container means a storage compartment and below itself a metering compartment, said partition wall means having an opening connecting said compartments; a tubular conduit means extending from said partition wall means upwardly in said container means, said tubular conduit means being integral at the lower end thereof with said partition wall means, opening therethrough, and communicating with said metering compartment; a cover member covering said open end of said container means, said cover member including a spout portion communicating with said tubular conduit means so that when said container means is inverted fluid within said metering compartment may flow out of said container means through said tubular conduit means and said spout portion of said cover member, said cover member being formed with a filler opening and an annular rim portion around said filler opening; and a flexible closure cap fitting on said annular rim portion closing said filler opening in said cover member.

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