

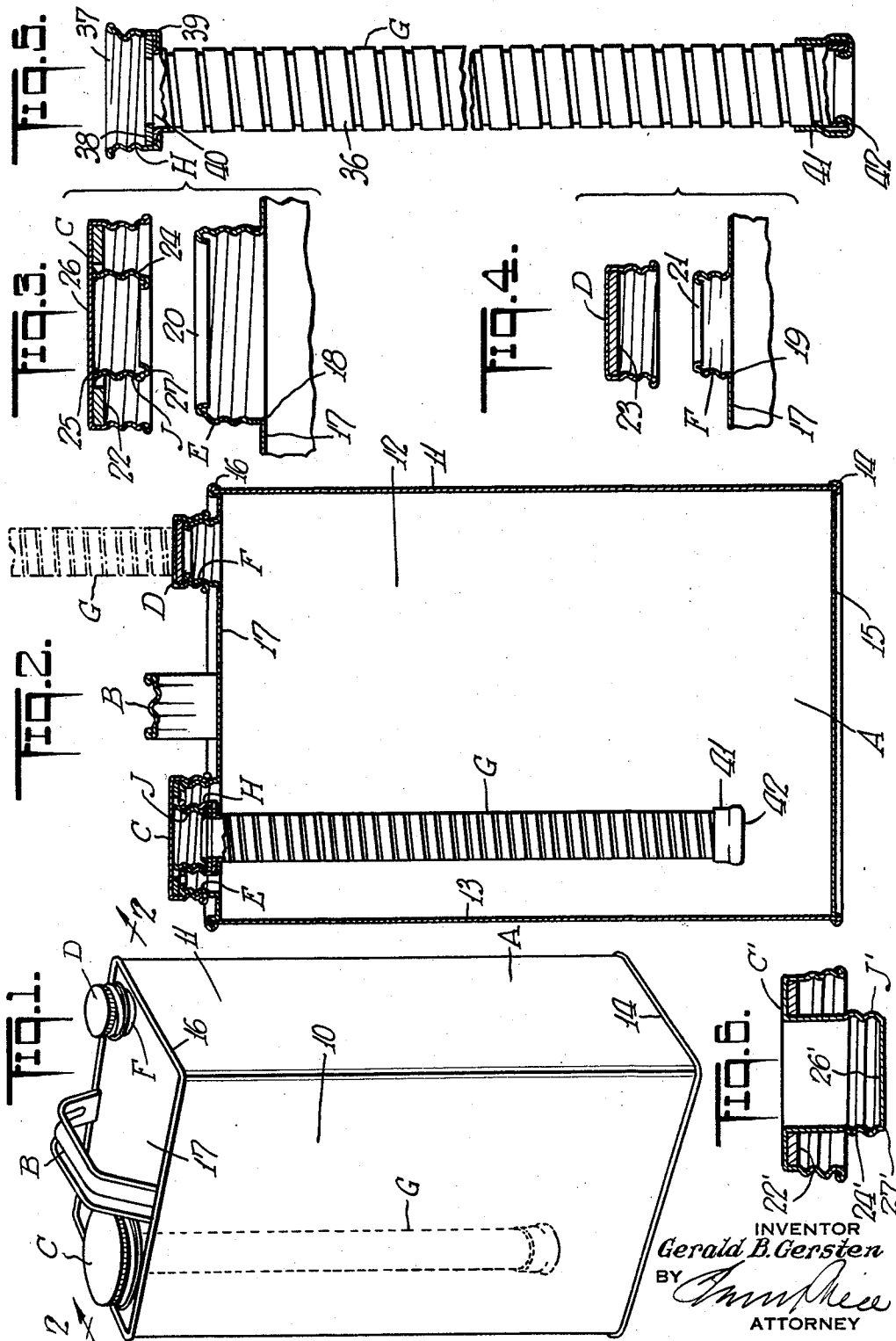
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LIQUID CONTAINING TANKS WITH REVERSIBLE SPOUTS

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LIQUID CONTAINING TANKS WITH REVERSIBLE SPOUTS

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2 Claims. (Cl. 222—539)

The present invention relates to liquid containing tanks and particularly relates to gasoline tanks which may be carried in or about an automotive vehicle for transporting extra supplies of gasoline or other liquid fuel or lubricant.

It is among the objects of the present invention to provide a compact fuel, oil or other liquid containing tank which will contain or receive a spout which may be inverted so as to be received in the container when not in use and which may be readily removed therefrom and thereafter reversed. When it is to be used for pouring fuel, lubricant or other liquids into supply compartments, whether they be for automotive vehicles or other equipment of fixed or moving characteristics.

In connection with such types of containers for fuels, lubricants and the like, it is necessary that the container or portable tank be reliably sealed during transportation and after filling and before usage and at the same time it is also desirable that the spout be kept out of the way and readily accessible for subsequent pouring operations.

Furthermore, it is desirable that the spout be readily attached for pouring purposes and then replaced within the container when no longer being used without likelihood of loss and with assurance that complicated mechanical procedures are not required.

It is therefore among the further objects of the present invention to provide a pouring spout arrangement of the character above described which may be readily manipulated to be inserted either within the tank or container when not in use and readily removed therefrom for attachment to the tank when the tank is to be used for pouring purposes.

Still further objects and advantages will appear in the more detailed description set forth below, it being understood, however, that this more detailed description is given by way of illustration and explanation only and not by way of limitation, since various changes therein may be made by those skilled in the art without departing from the scope and spirit of the present invention.

In accomplishing the above objects it has been found most suitable to provide a portable tank or container for carrying and transporting liquid fuel, such as gasoline, fuel oil, lubricant, flushing liquids, brake fluids and other liquid preparations, which has a plurality of openings, one of which may be used for an air vent or for filling purposes and the other of which may be used for dispensing purposes.

In the preferred construction, the top of the tank is provided with two projecting threaded tubular openings for receiving screwed caps.

One of the screwed caps is desirably provided with an interior screw extension for receiving the threaded end of a pouring spout while the other screw cap upon removal will provide an alternative seat or threaded connection for the pouring spout.

By this procedure, it is possible to keep the reversible spout connected to either one threaded connection or to the other and at the same time have different threaded

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cap openings on the container respectively for filling the container or for dispensing the liquid therein.

With the foregoing and other objects in view, the invention consists of the novel construction, combination and arrangement of parts as hereinafter more specifically described, and illustrated in the accompanying drawings, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which fall within the scope of the claims hereunto appended.

In the drawings wherein like reference characters denote corresponding parts throughout the several views:

Fig. 1 is a front perspective view of one form of the container according to the present invention with the pouring spout in inactive position therein.

Fig. 2 is a transverse sectional view upon the line 2—2 of Fig. 1 on a slightly enlarged scale as compared to Fig. 1.

Fig. 3 is an exploded transverse fragmentary vertical sectional view of the cap construction for the larger opening at the left of the container of Figs. 1 and 2.

Fig. 4 is a separated transverse fragmentary sectional view of the smaller cap structure at the right of Figs. 1 and 2.

Fig. 5 is a side elevational view of the pouring spout showing the ends of the pouring spout in section and with the spout being partly broken away for economy of space.

Fig. 6 is a transverse sectional view similar to Fig. 3 of an alternative embodiment.

Referring to Figs. 1 and 2, there is shown the container A having the handle B with the screw caps C and D.

The screw caps C and D are respectively received on the threaded sleeves E and F which project upwardly therefrom and which may be integrally formed from the metal of the tank or container A.

The pouring spout G has an enlarged screw end portion or cup H which may either be screwed onto the projecting threaded sleeve J of the cap C or onto the projecting threaded member F when used for pouring purposes.

Although the present invention is described in its particular application to a rectangular gasoline tank for use with automotive vehicles, it is to be understood that it has a much broader application to tanks for carrying a wide variety of liquids which may be utilized in connection with automotive vehicles, fixed machinery, marine equipment, and in or about the household, factory or garage.

The side walls 10, 11, 12 and 13 of the tank may be smooth, of sheet metal. These walls may be seamed as indicated at 14 with a base sheet 15 and they may also be seamed as indicated at 16 with a cover sheet 17.

The cover sheet 17 may be pressed upwardly and threaded as indicated at 18 and 19 (see Figs. 3 and 4) to form the screw necks E and F which receive the caps C and D.

The top of the screw connections E and F are turned inwardly as indicated at 20 and 21 to form a seal against the gaskets 22 and 23 which are received inside of the caps C and D. The cap C has a depending threaded member 24 which may be welded or soldered at 25 to the top 26 of the cap C.

It will also be noted that at the end of the threaded portion 24 has the inturned edge 27.

The pouring spout G consists of a flexible metal tube 35 which has a cup H at one end threaded as indicated at 37 and containing an annular sealing gasket 38 upon the shoulder 39.

The outturned flange 40 at the upper end of the flexible tube 36 is held in position inside of the gasket 38 and the bottom of the cap H.

The lower end of the flexible tube 36 has a tubular closure 41 which is turned inwardly at 42 to form a smooth end.

In usage, the cup H of the spout G is normally screwed onto the depending threaded portion J as indicated in Figs. 1 and 2. In this position the cap C may be removed and liquid poured into the container A with or without removal of the cap D.

When the cap C is replaced with the spout G attached thereto, the container of Fig. 1 may be transported or placed in the trunk compartment of a car and the extra fuel supply or extra liquid supply may be conveniently transported until need for consumption arises.

When it is required to pour extra fuel or oil or other liquid into a supply reservoir, the cap C is first removed and the spout G is unscrewed therefrom.

Then the cap D is removed and the cup H of the spout G is screwed onto the member E. With the cap C off, the liquid in the container A may be readily poured out through the spout G since the container A will be vented through the opening E.

When the contents of the container A have been dispensed, the spout G may be removed from the threaded mouth F, replaced on the nipple J of the cap C and reinserted into the container in the manner shown in Fig. 1.

In the alternative embodiment of Fig. 6 the element J instead of being soldered or welded to the base 26 as shown in Fig. 3, is formed or pressed out of the metal of the base 26.

In the construction of Fig. 6 the same parts or similarly functioning parts are indicated by the same numerals and letters which are, however, primed.

Referring specifically to Fig. 6, the drawn shell J' will be formed out of the metal of the cap C' and will take the form of a measuring device or cup.

The same threaded nozzle or cup 37 may be threaded onto the threaded portion 24' of the measuring cup J'.

In both embodiments of Figs. 3 and 6, the nozzle assembly H will screw onto the underside of the caps C and C'.

The nozzle tube G will therefore be inside of the can A when not in use.

On the other hand, to use the flexible tube or nozzle G, the cup H is unscrewed from either the cap C or the cap C'. When this cap assembly H is screwed onto the threaded member F a convenient spout is formed.

The applicant has thus provided a most convenient and readily operated extra fuel container or auxiliary or emergency tank device which may be employed in connection with automotive fuels, boats and in numerous other places, enabling ready pouring of liquids from containers into supply tanks without the need of special spouts or spouted constructions and some standard shape

and sized container which may be used in connection with transportation and storage of the liquid fuel, lubricant or other liquid.

Referring to Figs. 1 to 4, the threaded extensions or necks E and F, which may be positioned on the top wall of the can, may be formed integrally with the top of the can by being drawn upwardly, or they may be formed separately and soldered to the top of the can or they may be bumped on with dies.

In the latter case when they are bumped on with dies the portions E and F are made separately and their lower ends are flanged so that they may be readily joined with the corresponding flange at the openings in the top wall 17 of the tank by means of a reciprocatory die.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. A rectangular gasoline can having side sheet metal walls and a top wall, said top wall having an upturned cylindrical threaded neck integrally formed from the metal at the top of the can and serving as a flow opening to permit passage of gasoline from within and to within the can, the upper end of said neck having an inturned bead to serve as a sealing edge, a removable reversible flexible spirally wound spout inserted within the can when not in use and attached to and projecting from said neck when in use, said spout at one end having a threaded cup with the end of the spout being soldered to and mounted in the bottom of said cup and the bottom of the cup having an annular sealing gasket around said cup opening and lodged in the bottom of the cup by the threading of the cup, said cup being threaded onto said neck when the spout extends outwardly from the neck in pouring position, said threaded cup on said spout having a threaded connection means to said top wall whenever the spout is inverted and is not in pouring position but extends within said can, and a separable cap having concentric threaded members adapted to cooperate with the threads of said threaded connection means of said top wall and the threads of said cup on said spout for closing the neck of said can and for holding the spout within said can.

2. The can of claim 1 in which the inner one of the threaded members of the cap has an inturned free edge adapted to form a seal in cooperation with the annular sealing gasket in said cup of said spout.

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