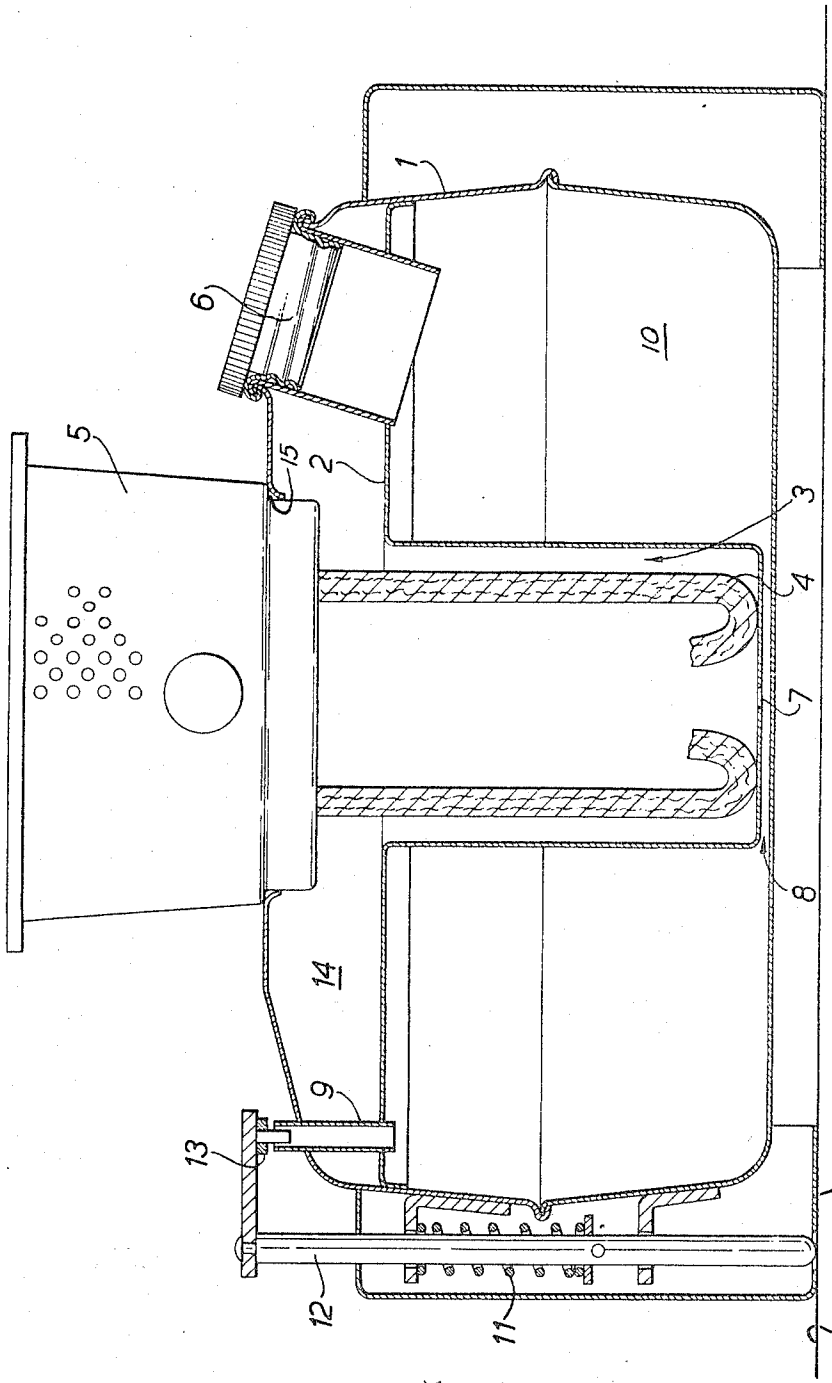
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LIQUID FUEL BURNER FONT WITH AUTOMATIC FEED CUT-OFF

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LIQUID FUEL BURNER FONT WITH AUTOMATIC FEED CUT-OFF

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3 Claims. (Cl. 67—81)

This invention relates to containers for liquids and primarily concerns liquid fuel reservoirs for wick-type oil burning appliances. In apparatus of this kind, the fuel reservoir must, of necessity, be provided with a tube or tubes passing through the top of the reservoir to accommodate the wick. The latter must be an easy sliding fit in the tube or tubes, in order to allow the wick to be raised and lowered, so that some clearance must be left between the wick and wick tubes. For this reason, if the appliance is accidentally overturned, oil from the reservoir flows freely through the space between the wick and wick tubes when the fuel reservoir is more than half full and in the case of large burners, the resultant spillage can be considerable.

The principal object of this invention is to provide a liquid container such as a fuel reservoir which can be tipped at any angle up to at least a right-angle in any direction substantially without spilling any of its contents. According to the invention there is provided a container for liquids comprising a dual compartment tank wherein the compartments are connected together by an aperture and/or passage adapted to pass liquid freely therebetween, one compartment being provided with a vent pipe in which is fitted a valve adapted to close automatically if the container is lifted or overturned.

In operation, closure of the valve in the vent pipe effectively prevents any liquid flow from one compartment to the other so that a tank of the type described can be tilted through any angle up to at least a right angle substantially without any spillage of its contents.

It must be understood that although the method of putting this invention into effect to be described deals only with its application to wick-type liquid fuel burners, it is no way limited to this application and can equally well be used for other types of container for inflammable, corrosive or other liquids which may be accidentally overturned.

An embodiment of the invention will now be described with reference to the accompanying drawing showing a section through the fuel reservoir of a liquid fuel burning appliance of the wick type.

The reservoir comprises a tank **1** separated by an inner partition wall **2** into compartments **10** and **14**. Compartment **14** includes a central reduced diameter well **3** projecting into and surrounded by compartment **10** and into which depend the wick tails **4** of the burner **5**, the latter being mounted in a central hole **15** in the upper wall of the tank. Oil admitted to compartment **10** after removal of the filter cap **6** can only flow into the well of

compartment **14** by means of a small opening **7** at or near the base of the compartment well **3**. Moreover, such flow can only take place so long as air can be admitted into compartment **10** through the vent pipe **9**. So long as the appliance is standing normally on its base **16** on a support **17** as shown, vent pipe **9** is open but if the appliance is lifted or tilted, a compression spring **11** acts on a rod **12** to close the vent pipe by means of a plug valve **13**. Normally valve **13** is held open and spring **11** compressed by rod **12** engaging support **17**. When the valve closes, no more oil can flow into the well of compartment **14** and if the appliance is tilted, the oil already in well **3** will flow into the upper space of compartment **14** which is large enough to accommodate it without the level rising above the lower edge of the hole **15** in which the burner **5** is mounted.

I claim:

1. A fuel reservoir for a liquid fuel burning appliance comprising a tank, a partition separating said tank into two compartments, one of which has a lower portion in the form of a central wick-receiving well projecting into the other compartment and communicating at or near its lower end with said other compartment through a small aperture in said partition and an upper portion formed at its upper end with an opening for reception of the burner of the appliance, said upper portion being of a size sufficient to accommodate oil from the well and prevent its escaping through said opening when the tank is tipped, means defining a vent from said other compartment to atmosphere and valve means for closing said vent automatically when said tank is lifted or tilted with respect to a support on which it stands.

2. A fuel reservoir according to claim **1**, wherein said valve means is normally held open against the action of a loading spring by a rod connected thereto and projecting through the base of the reservoir into engagement with said support.

3. A fuel reservoir according to claim **1**, wherein said well is a tubular reduced diameter section of the partition terminating in an end wall lying closely adjacent the bottom wall of said tank, and said small aperture being formed in said end wall of the well.

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