April 28, 1936. W. C. READEKER 2,038,676

SIPHONPROOF FUEL TANK

Filed Jan. 11, 1935

Fig. 1

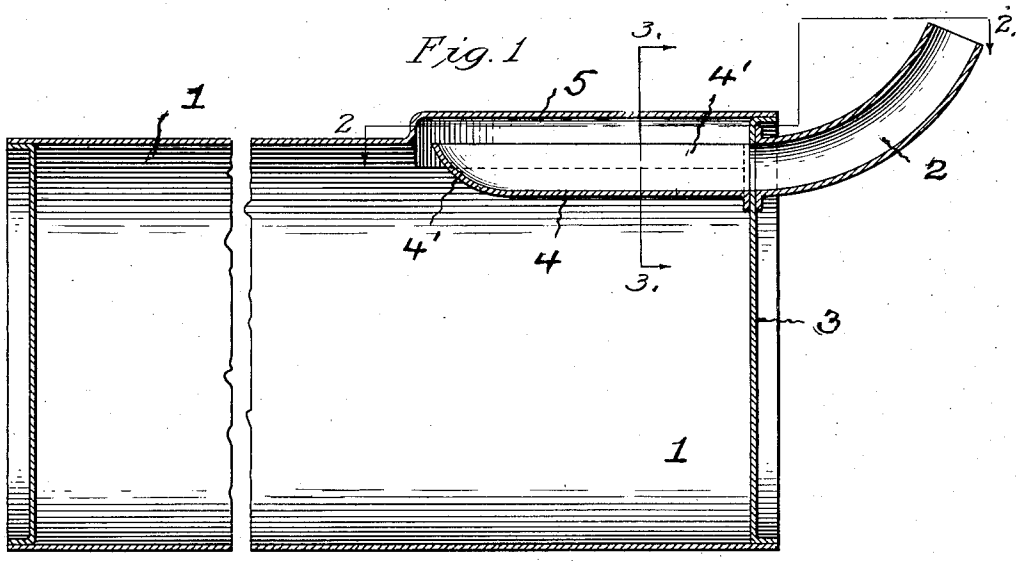


Fig. 2

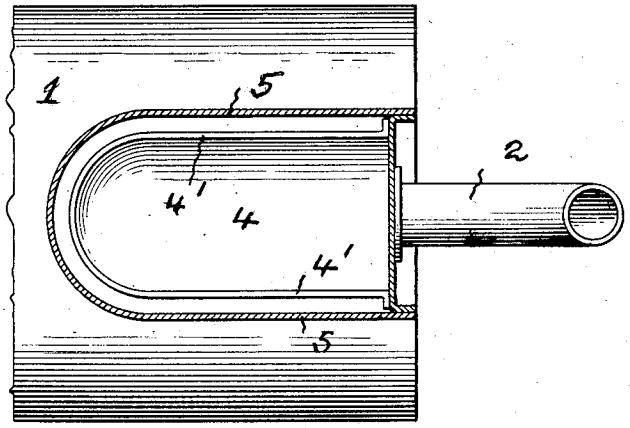


Fig. 3

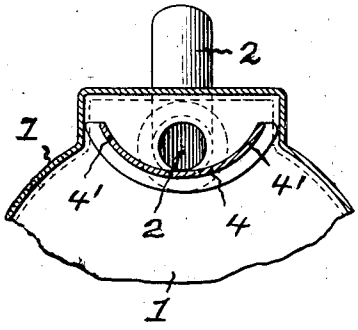
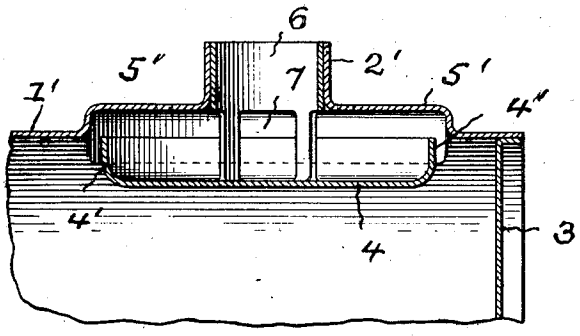


Fig. 4



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SIPHONPROOF FUEL TANK

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Application January 11, 1935, Serial No. 1,403

2 Claims. (Cl. 220—86)

This invention relates to that type of siphon proof fuel tanks in which a baffle member is arranged in or adjacent to the filling inlet of the tank for the purpose of preventing the introduction of a flexible siphoning tube into the main chamber thereof with a view to a felonious removal of the fluid fuel contents of the tank; and this improvement has for its object:

To provide a structural formation and association of parts in a fuel tank of the type above referred to, whereby the abstraction of a very small amount of the fluid contained in the tank can be made, even when the same is completely filled with fluid fuel, and with which an avoidance of short turns in the path of the fluid inflow, and the consequent disturbance, retardation in and loss by spilling of the fluid fuel, which would occur with pressure filling apparatus now in general use, and when ordinary forms of safety devices are provided in the inlet passage of fuel tanks. All as will hereinafter more fully appear.

In the accompanying drawing:

Fig. 1 is a central longitudinal section of a motor vehicle fuel tank to which the preferred form of this invention is applied.

Fig. 2 is a horizontal section of same on line 2—2 Fig. 1.

Fig. 3 is a detail transverse section on line 3—3 Fig. 1.

Fig. 4 is a central detail longitudinal section of a modified form of the invention.

Like reference numerals indicate like parts in the different views.

The fuel tank 1 may be of any usual form now in use on motor vehicles and the like, a closed and horizontally arranged cylindrical form of tank 1 being shown in the drawing as a means for illustrating the practical application of this invention. A material part or feature of this invention comprises the provision of a dome shaped member or shell 5, fixedly attached to the top portion or crown of the tank 1 and opening into same for cooperation with the other features of the invention.

In the preferred application of this improvement as shown in Figs. 1, 2 and 3 the usual filling spout 2 of the tank passes horizontally through an end head 3 at a point closely adjacent to the top of the same, and in the preferred construction shown the opening of said spout into the interior of the tank 1 has its lower portion arranged in horizontal alignment with the bottom web or wall of the open top baffle member now to be described.

The baffle member above referred to, in its preferred form as shown in Figs. 1 and 2, is of an elongated U shape, comprising a bottom web or wall 4 having an upstanding marginal flange or wall 4' in order to impart to the baffle member the form of a shallow open top tray. Said baffle member is rigidly attached at one end to the inner end of the filling spout 2, with its inner semi-circular end portion arranged in concentric relation to a flat dome or crown extension 5 formed in the top wall of the tank 1, adjacent to the end thereof to which the filling neck 2 has attachment.

In this improvement the top line of the aforesaid upstanding flange or wall 4' of the baffle member is positioned on, or closely adjacent to, the horizontal bottom line of the crown or dome extension 5, aforesaid, and as so arranged constitutes a material part or feature of this invention in that it provides effective means for preventing the insertion of a flexible siphon tube into the interior of the tank for felonious abstraction of the fuel contents therefrom. In addition it provides for a complete filling of the tank with fluid fuel and at the same time materially reduces the lateral swash of the fuel in the tank when in road service and the splashing and leakage of the fuel into and out of the spout 2, which is an ordinary occurence with the ordinary form of fuel tanks.

In the modification shown in Fig. 4, the dome shaped member or shell 5' on the top of the fuel tank 1 is of a circular shape and carries the vertically arranged filling spout 2' of the tank, which in the construction carries a fixed sleeve 6 which depends a distance below said inlet spout and in turn carries at its lower end a circular baffle member comprising a bottom web or wall 4 and an upstanding marginal wall or flange 4' similar in structure and purpose to the above described preferred form of the invention and arranged in like manner in relation to the bottom line of a crown or dome shaped member or shell 5' at the top of the tank.

The inflow of fluid fuel into the tank 1 is down through the inlet spout 2' and the baffle supporting sleeve 6, through lateral openings or ports 7 in the lower portion of the sleeve 6 onto the baffle member 4, 4', and thence over the edge of the baffle member into the main chamber of the fuel tank 1.

Having thus fully described my invention what I claim as new, is:—

1. A siphon proof fuel tank, comprising a closed tank, a dome shaped member or shell attached to the top or crown portion of said tank, and having communication with the interior of the tank, a filling spout associated with said dome shaped member, a baffle member arranged in concentric and closely adjacent relation to the base line of said dome shaped member or shell and comprising a bottom wall and an upstanding marginal wall imparting a shallow open top chamber formation to the baffle member adapted to receive the incoming fuel from the filling spout.

2. A siphon proof fuel tank, as specified in claim 1, wherein the filling spout has connection with the interior of the tank at the upper portion of an end wall of the tank.

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