Jan. 18, 1944. W. F. TILLERY 2,339,303

FUEL TANK

Filed Sept. 15, 1942

FIG 1

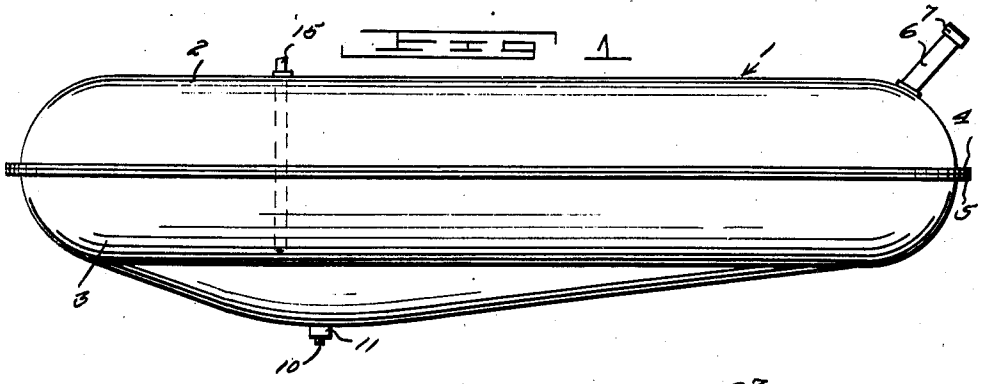


FIG 2

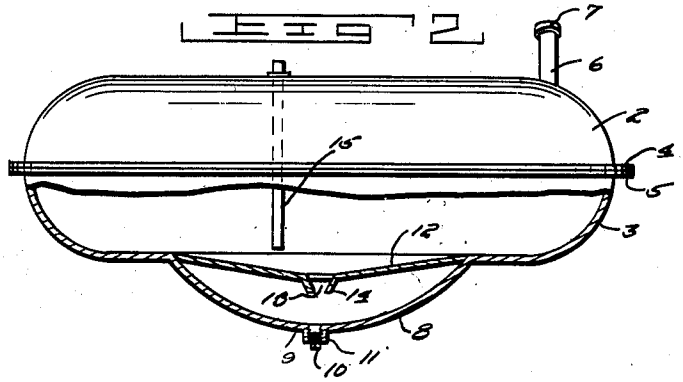
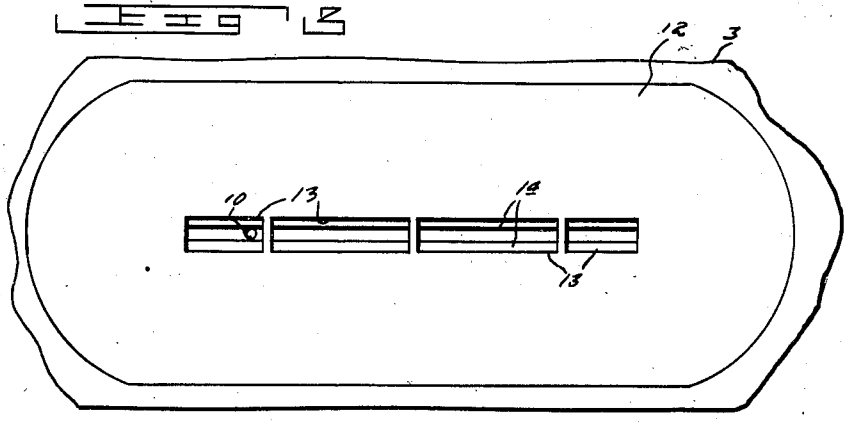


FIG 5



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FUEL TANK

William Franklin Tillery, Honolulu, Territory of Hawaii

Application September 15, 1942, Serial No. 458,407

1 Claim. (Cl. 220—1)

My invention relates to improvements in fuel tanks, either gasoline or oil, and of motor vehicles, marine vessels, and the like.

The principal object of my invention is to equip such tanks inexpensively with practical and efficient means for trapping under the influence of gravity water, dirt, and other foreign matter in the fuel, to the end that such foreign matter will be prevented from finding its way into the fuel pumps, carburetors, feed lines, and other parts of power plants of which such tanks form the source of fuel supply.

Other and subordinate objects are also comprehended by my invention, all of which, together with the precise nature of my improvements, will be readily understood when the succeeding description and claim are read with reference to the drawing accompanying and forming part of this specification.

In said drawing:

Figure 1 is a view in side elevation of a fuel tank equipped according to my invention,

Figure 2 is an end view partly broken away and shown in section, and

Figure 3 is a fragmentary view in top plan of the bottom section.

Referring to the drawing by numerals, my improvements have been shown therein as embodied in a fuel tank 1 of elongated flat form, such are are used as automobile equipment, and which is formed preferably of top and bottom sections 2, 3 having mating edge flanges 4, 5 by means of which the sections are suitably secured together, as by welding, not shown. At one end of the tank 1 is the usual inclined filler neck 6 and closure cap 7 for said neck.

The bottom section 3 is provided in the longitudinal center thereof with an elongated relatively narrow sump 8 which is of dished form transversely and inclines downwardly from opposite ends of the section 3 to a deepest portion 9 preferably adjacent one end of said section. A drain plug 10 threaded into a nipple 11 depending from the sump 8 at said deepest portion 9 provides for draining the sump at will. The tank 1 is preferably formed of metal, as is usual, and the sump 8 is preferably pressed out of the bottom section 3.

A false bottom section 12 is provided in the sump 8. The false bottom section 12 fits in the top of the sump 8 and is suitably secured therein. In the longitudinal center of the false bottom section 12 is a series of closely spaced aligned narrow slots 13. Preferably, the false bottom 12 is of dished form transversely and longitudinally to incline downwardly to said slots 13. Depending from the side edges of the slots 13 are short lips 14, the lips on opposite sides of the slots converging, relatively.

The usual fuel line 15 depends into the tank 1 through the top section 2 and terminates above the false bottom section 12, or, in other words, adjacent the actual bottom of the tank.

As will be readily understood, sand and other sediment in the fuel will collect in the false bottom section 12 and gravitate through the slots 13 into the sump 8 to be trapped in the latter. Water in the fuel, being heavier than oil or gasoline, will find its way into the sump 8 through said slots 13 washing sediment in the false bottom section downwardly through said slots 13. The lips 14 form baffles acting to prevent sediment trapped in the sump 8 from being washed back into the false bottom 12 and tank under agitation of water collected in the sump. The sump 8 may be drained as occasion may require by removing the drain plug 10.

The foregoing will, it is believed, suffice to impart a clear understanding of my invention without further explanation.

Manifestly, the invention, as described, is susceptible of modification without departing from the inventive concept, and right is herein reserved to such modifications as fall within the scope of the appended claim.

What I claim is:

A fuel tank of the class described comprising a bottom having pressed out of the same a transversely dished elongated sump relatively narrower than said bottom and inclining downwardly from opposite ends thereof to a deepest intermediate portion adjacent one end of the sump, a drain plug in said deepest portion, and a dished false bottom fitted in the top of said sump and provided with a row of narrow slots arranged end to end in the longitudinal center of the sump and having downturned side baffle forming edges for preventing back wash from said sump into said false bottom by way of said slots.

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