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AUTOMOBILE FUEL TANK.
APPLICATION FILED JUNE 12, 1914.

1,238,073. Patented Aug. 21, 1917.

FIG. I.

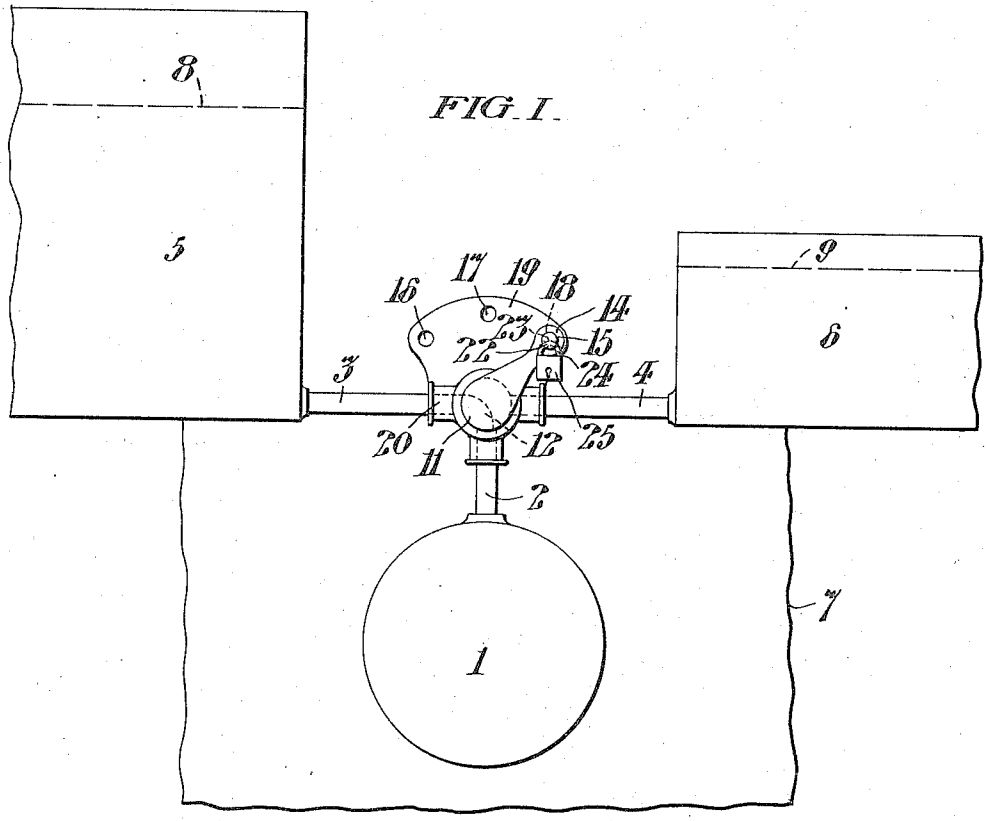


FIG. II.

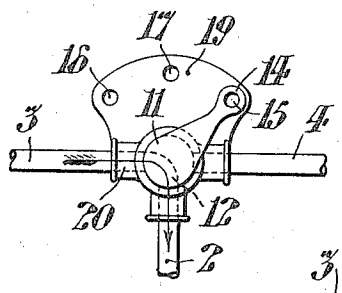


FIG. III.

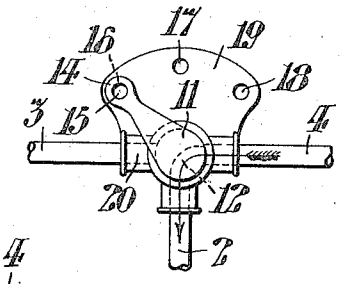
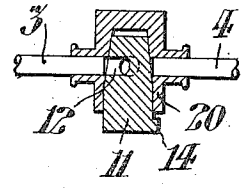


FIG. IV.



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UNITED STATES PATENT OFFICE.

WILLIAM H. HOLLAR, OF PHILADELPHIA, PENNSYLVANIA; LAURA A. HOLLAR EXECUTRIX OF SAID WILLIAM H. HOLLAR, DECEASED.

AUTOMOBILE FUEL-TANK.

1,238,073. Specification of Letters Patent. Patented Aug. 21, 1917.

Original application filed April 12, 1910, Serial No. 554,965. Divided and this application filed June 12, 1914. Serial No. 844,673.

To all whom it may concern:

Be it known that I, WILLIAM H. HOLLAR, a citizen of the United States, residing at Philadelphia, in the State of Pennsylvania, have invented a certain new and useful Improvement in Automobile Fuel-Tanks, whereof the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to prevent unauthorized use of a self propelled vehicle by predetermined limitation of the supply of energy to the motor by which it is propelled. Broadly stated my invention consists in providing an auxiliary source of energy in addition to the main source of energy for said motor, and means to restrict said motor to said auxiliary source to the exclusion of said main source. For instance, as hereinafter described, my invention may be applied to an engine driven automobile by providing the engine with two distinct sources of fuel, and controlling means, whereby, one source including a main supply may be placed in communication with the motor when it is desired to operate the latter without restriction, and, the other source including an auxiliary predetermined limited supply may be placed in communication with the motor to the exclusion of the main supply when it is desired to restrict the operation of the automobile.

My invention includes the provision of locking means to prevent unauthorized change in the controlling means aforesaid, and, the various novel features of construction and arrangement hereinafter more definitely specified. A modified form of the invention is claimed in Letters Patent of the United States No. 1,105,272 dated July 28, 1914, of which this is a division.

In the drawings: Figure I is a diagram indicating a typical embodiment of my invention in connection with an internal combustion motor, carried by an automobile.

Figs. II and III are fragmentary views of the valve and locking means indicated in Fig. I, but showing different positions thereof.

Fig. IV is a horizontal central sectional view of the valve casing and plug as shown in Figs. I and II.

In said drawings; the internal combustion motor 1 is provided with the fuel conduit 2 having the branches 3 and 4 respectively leading from the tanks 5 and 6, carried by the automobile 7; so that said conduit 2 is thus common to both of said tanks. Said tank 5 includes a main supply of fuel 8 which may be replenished by anyone having access to said tank, regardless of my invention, and is placed in communication with said motor 1 when it is desired to operate the latter without restriction, but, said tank 6 is charged with an auxiliary, definitely limited, supply of fuel 9 which, under control of my invention, may be placed in communication with said motor 1 to the exclusion of said main supply when it is desired to restrict the operation of the automobile.

Said conduit 2 and its branches 3 and 4 are provided with controlling means including the rotary valve 11 having the passageway 12 which, when the valve is set in the position shown in Fig. II, places the main source of fuel 5 in communication with said motor 1 to the exclusion of said auxiliary source of fuel 6. However, when said valve 11 is turned to the position shown in Fig. III, said passageway 12 places the auxiliary source 6 in communication with said motor 1 to the exclusion of said main source 5.

Said valve 11 being conveniently formed as a rotary conical plug is provided with the lever arm 14 having the opening 15 adapted to register with the openings 16, 17 and 18 in the plate 19 which is stationary and conveniently cast on the valve casing 20. Said valve 11 may be set in the position shown in Fig. II or in the position shown in Fig. III or in an intermediate position wherein the conduit 2 is closed by said valve 11, and the latter may be held in either of said positions by the locking means including the pin 22 which extends through said plate 19 and arm 14 and has the opening 23 to engage the shackle 24 of the lock 25. Of course, both said valve 11 and pin 22 must be moved axially to insert and remove them, and such movement is prevented when said pin is engaged by said shackle 24 in the locked position shown in Fig. I or either of the other two locked positions to which said valve may be shifted. However, when unlocked, both said valve and pin are free for both axial and rotary movement and said valve may be rotated, or withdrawn to

charge said tank 6 with fuel 9, from the main supply 8 in the tank 5. Although the volume of said auxiliary tank 6 is invariable it is obvious that the auxiliary supply of fuel 9 with which it is charged may be varied in quantity within the limit of capacity of said tank; for instance, as indicated by the dash line in Fig. I, said tank is only charged to approximately five-sixths of its capacity. Of course, when said valve is locked in the position shown in Fig. III the main supply of fuel 8 in the tank 5 is shut off from said conduit 2 and the latter placed in communication solely with the auxiliary supply of fuel 9 in said tank 6, and the operation of the automobile restricted in accordance with the amount of said auxiliary fuel thus placed in communication with the motor 1.

Although I have illustrated my invention as applied to an automobile having an internal combustion motor, it is to be understood that other types of motors may be employed, and, that my invention is applicable to other self-propelled vehicles, for instance, boats, aeroplanes and dirigible balloons.

Therefore, I do not desire to limit myself to the precise details of construction and arrangement herein set forth as it is obvious that various modifications may be made therein without departing from the essential features of my invention as defined in the appended claims.

I claim:—

1. In an automobile, the combination with a main fuel tank; of an auxiliary fuel tank; a conduit common to both tanks, having respective branches leading to said tanks; means for preventing communication between said tanks, for preventing unauthorized increment of the working volume of fuel in said auxiliary tank, and for establishing communication between said conduit and tanks, in alternation, whereby each of said tanks is excluded from communication with said conduit when the other tank is in communication therewith, including a valve casing at the junction of said conduit and its branches, a rotary conical plug valve movable in said casing, and means for locking said valve in three different positions.

2. In an automobile, the combination with a main fuel tank; of an auxiliary fuel tank; a conduit common to both tanks, having respective branches leading to said tanks; means for preventing communication between said tanks, for preventing unauthorized increment of the working volume of fuel in said auxiliary tank, and for establishing communication between said conduit and tanks, in alternation, whereby each of said tanks is excluded from communication with said conduit when the other tank is in communication therewith, including a valve casing at the junction of said conduit and its branches, a valve in said casing, and means for locking said valve in three different positions; all of the contents of both tanks being above the level of said valve.

3. In an automobile, the combination with a main fuel tank; of an auxiliary fuel tank; a conduit common to both tanks; and means for preventing communication between said tanks, for preventing unauthorized increment of the working volume of fuel in said auxiliary tank, and for establishing communication between said conduit and tanks, in alternation, including a valve, whereby each of said tanks is excluded from communication with said conduit when the other tank is in communication therewith; all of the contents of both tanks being above the level of said valve.

In testimony whereof, I have hereunto signed my name at Philadelphia, Pennsylvania, this sixth day of June, 1914.

WILLIAM H. HOLLAR.

Witnesses:
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WM. H. HOLLAR, Jr.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."