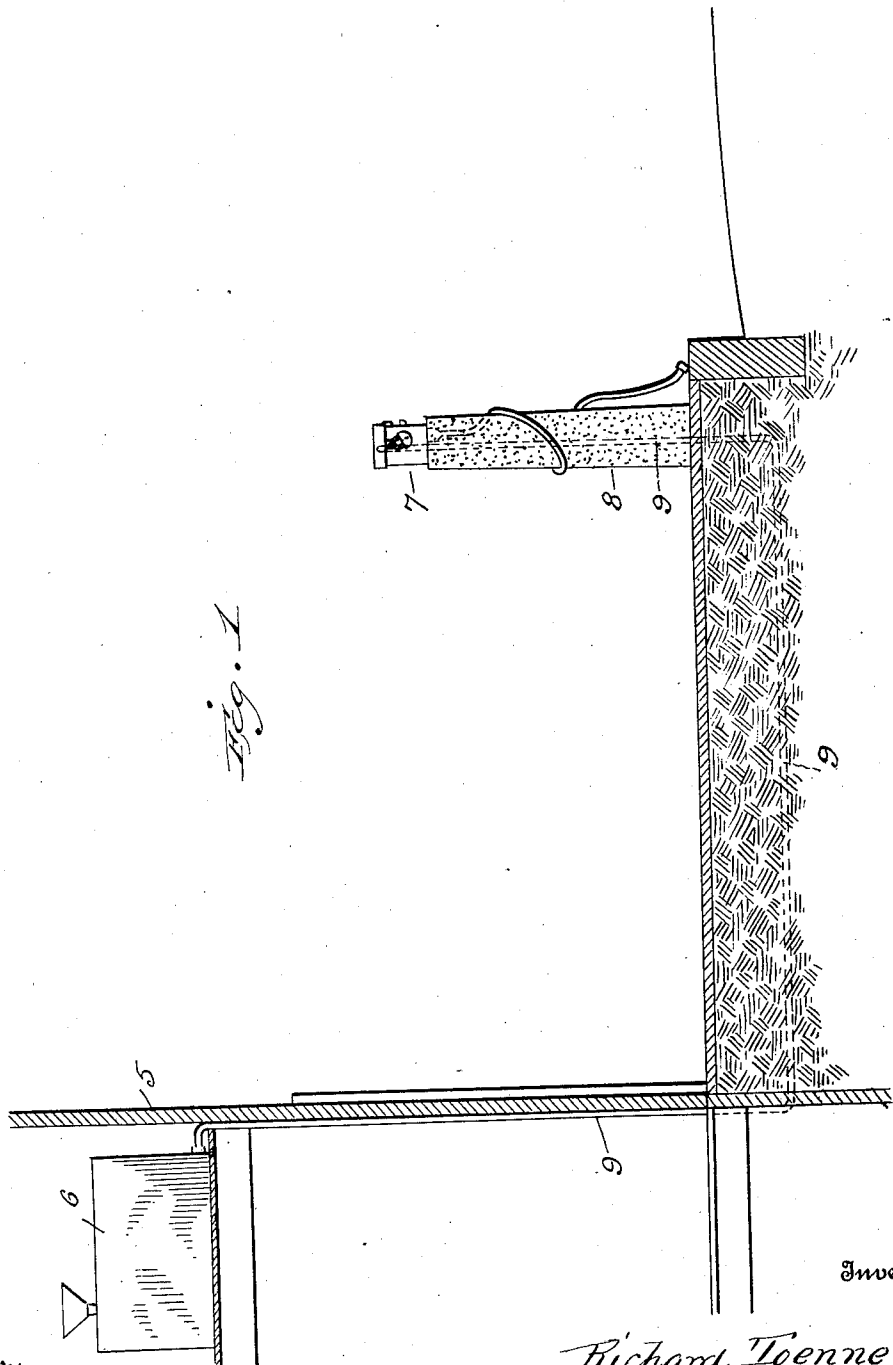


R. TOENNES.
AUTOMATIC GASOLENE DISPENSER.
APPLICATION FILED FEB. 3, 1911.

1,020,856.

Patented Mar. 19, 1912.

3 SHEETS—SHEET 1.



Inventor

Richard Toennes

By

Edwin L. Jewell
his Attorney

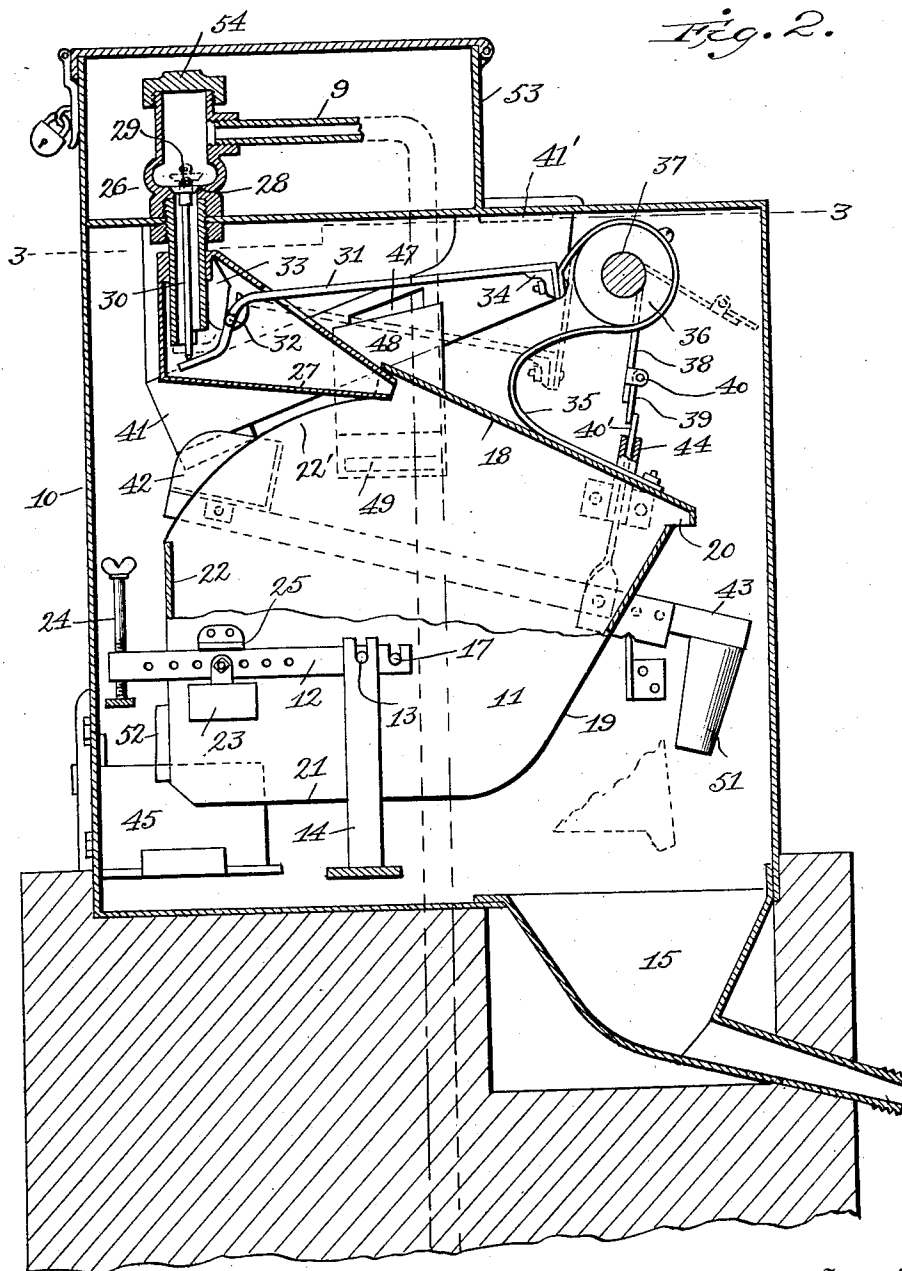
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3 SHEETS—SHEET 3.

Fig. 3.

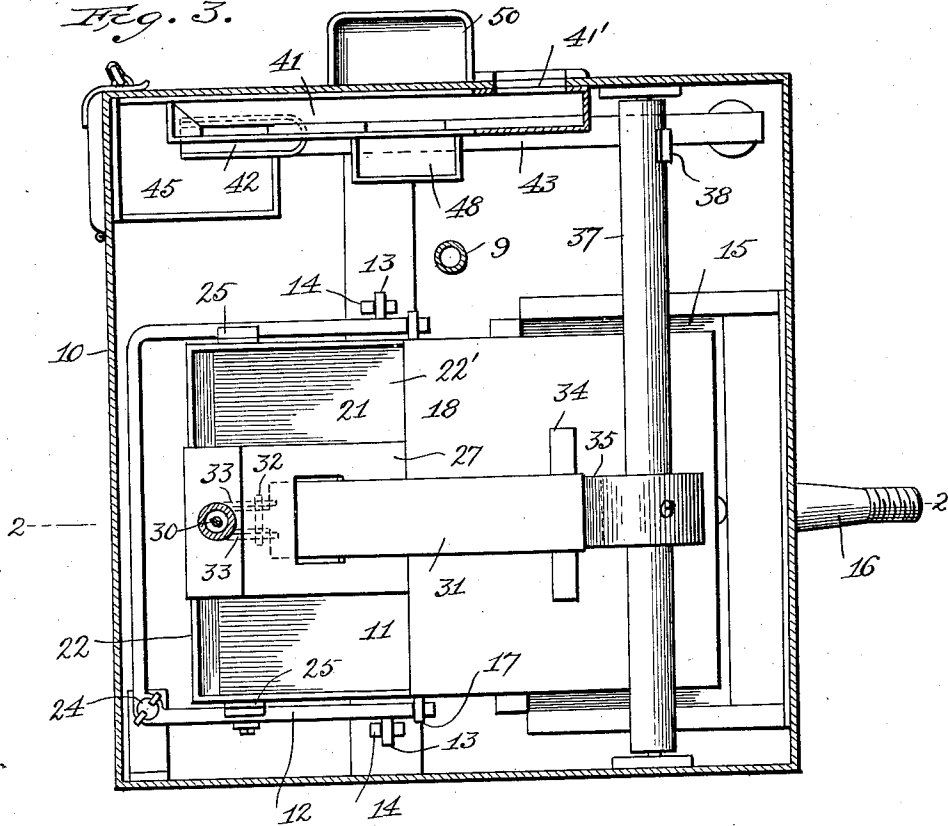
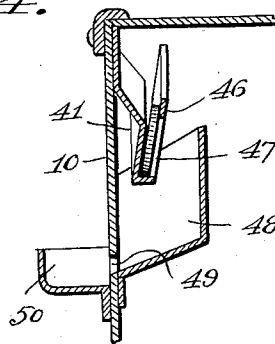


Fig. 4.



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UNITED STATES PATENT OFFICE.

RICHARD TOENNES, OF BOONVILLE, MISSOURI.

AUTOMATIC GASOLENE-DISPENSER.

1,020,856.

Specification of Letters Patent.

Patented Mar. 19, 1912.

Application filed February 3, 1911. Serial No. 606,441.

To all whom it may concern:

Be it known that I, RICHARD TOENNES, a citizen of the United States, residing at Boonville, in the county of Cooper and State of Missouri, have invented certain new and useful Improvements in Automatic Gasolene-Dispensers, of which the following is a specification.

This invention relates to improvements in coin controlled liquid dispensers and has for its particular object to provide a device of this character that will automatically deliver to a buyer a predetermined quantity of liquid, such as gasolene, upon depositing a coin of a predetermined amount.

Another object is to provide such a device in which the storage tank is located preferably a distance from the measuring device, whereby said device can be positioned upon the outside of a building, while the storage tank can be locked within.

A further object provides a measuring device which is normally empty, the inlet valve of which is operated by a coin, the outlet being automatic.

These and other objects are attained by means illustrated in the accompanying drawings, in which:

Figure 1 represents a view of my improved device positioned for operation. Fig. 2 is a vertical sectional view of the dispenser, taken on the line 2—2 of Fig. 3. Fig. 3 is a horizontal sectional view taken on the line 3—3 of Fig. 2. Fig. 4 is a detail vertical section taken on the line 4—4 of Fig. 3.

Similar reference numerals in the several figures of the drawings designate the same parts.

It is a common occurrence in automobil- ing to have the liquid fuel supply run short or become exhausted, and oftentimes this occurs at a distance from the final destination and at night, when places of business have closed, and to avoid the disturbance of the business proprietors and to accommodate the traveling public, the present invention has been devised, and referring to Fig. 1 of the drawing, where diagrammatically is shown the device in position for operation, 5 designates a building in which is stored a suitable supply tank 6. Located adjacent to the curbing of the sidewalk is the dispenser 7, preferably mounted upon a suitable post 8, which is preferably artificial stone, but may be wood, cast-iron, or other metal, and

connecting said dispenser with the supply tank, is a pipe 9, which preferably extends through the post 8 and underground to the building in which the supply is located, thus protecting said pipe from unscrupulous persons.

Referring to the other figures of the drawings, a detailed description of the construction of the dispenser will now be given, and its operation set forth.

The dispenser comprises a casing 10, in which is pivoted a measuring receptacle 11 mounted within a yoke 12, which in turn is pivotally mounted at 13 in vertical standards 14. The measuring receptacle 11 is so formed and mounted as to automatically dump or discharge into a hopper 15 having a discharge nozzle 16, to which a suitable hose can be attached, when a predetermined quantity of liquid is supplied thereto, it being pivoted in the yoke at 17, which point is forward of the pivots of said yoke.

The receptacle 11 is formed with an inclined top 18 inclined front side 19, a discharge opening 20 at their apex, a flat bottom 21, a vertical back wall 22, a wide mouth or opening 22' being left between said top 18 and the back wall 19. The side walls of the receptacle at this point are formed concentric with the pivots of said receptacle, for a purpose hereinafter specified. To regulate the amount of liquid the receptacle shall retain before dumping, the yoke 12 is provided with an adjustable weight 23, and an adjustable stop 24. The receptacle has side stops 25 which engage the yoke 12, for limiting the backward tilt.

For filling the receptacle a coin controlled valve 26 is provided, said valve being connected at its top to the supply pipe 9, and having at its lower end a spout 27 which incloses said lower end, and the mouth of which extends forward into the opening or mouth 22' of the receptacle. Thus it will be seen that in whatever position the receptacle is tilted, the mouth of the spout 27 will project into the mouth of said receptacle, thereby preventing dripping to the outside.

The valve comprises a vertical chamber open at its lower end, a valve seat 28 therein, and a gravity valve 29 having a stem 30, which projects at the lower end of the chamber when the valve 29 is seated or in its normal closed position. Valve 29 is operated or opened by a lever 31, pivoted at 32

in ears 33 fixed to said valve chamber. The lever 31 is provided with a weight 34 at the end of its longest arm, and operates to open the valve by gravity when its lock herein-
 5 after described is released. It is operated in the opposite direction by the tilting of the measuring receptacle, being connected thereto with the strap 35 which is connected to and passes over a crank wheel 36 mounted upon
 10 a rock-shaft 37. The means for locking said lever 31 against opening the valve 29 comprises an arm 38, extending from the rock-shaft 37, and provided with a pawl 39 pivoted at 40 to said arm 38. Said pawl has a
 15 forward free movement, but is limited in its backward movement by the arm 38 projecting behind it, and is adapted to engage a movable stop 40'. This stop 40' is controlled by a coin operated mechanism, said
 20 mechanism embodying a coin receiving chute 41, registering with a coin feed slot 41' through the casing and a coin receiving pocket 42 mounted upon the end of a pivoted arm 43. To this arm 43 is connected
 25 the movable stop 40', so that, when a coin drops into the pocket and overbalances the arm 43, said stop 40', having a guide 44, is drawn downward, and thereby releases the lock arm 38. The coin receiving pocket 42
 30 is open at its free end, to allow the coin to drop therefrom into the coin box 45 located in the bottom of the main casing.

To prevent coins of a smaller diameter than the predetermined coin from operating
 35 the device, the chute 41 is constructed to form an inclined passageway, so that the coin in its travel to the pocket 42 bears against the front side 46 of said chute, Fig. 4, and intermediate the ends of said chute is
 40 formed an aperture 47 of less height than the diameter of the proper coin. Thus a coin of smaller diameter will fall through this aperture 47, into a trough 48, through a slot 49, into pan 50, secured upon the out-
 45 side of the casing.

In operation, the parts being in the position shown in Fig. 2, with the measuring receptacle empty which is the normal condition, a proper coin, fed through slot 41',
 50 will pass down chute 41 and drop into pocket 42, which will overbalance the arm 43, withdraw the stop 40', release the arm 38 and allow the weighted end of the lever 31 to descend as shown in dotted lines, which
 55 throws its other end upward against the valve stem 30 and open the valve, thereby allowing the liquid to flow into the measuring receptacle. As before stated, when a predetermined quantity of liquid is sup-
 60 plied to said receptacle, it overbalances the weighted yoke, causing the receptacle to dump, and as the liquid is thrown to the front end of the receptacle, the weight thereof is released partially from the yoke
 65 allowing its return to the normal position,

the receptacle in the meantime emptying into the hopper 15.

When the receptacle is dumping it pulls upon the strap 35 and rotates the rock-arm 37, lifting the weighted end of the lever 31, 70 and allowing of the closing of the valve 29 which stops the flow of liquid. At the same time the arm 38 with its pawl 39, is caused to engage the adjustable stop 40', which has been returned to its normal position by the counterbalancing weight 51, after the coin 75 has dropped from the pocket 42. After the receptacle has emptied, its heavier rear end which is preferably weighted as shown at 52, returns to its normal position, and re- 80 mains empty until the next coin is fed to the apparatus. The upper end of the feed valve 26, is preferably inclosed with a suitable casing 53 having means for allowing access to said valve for cleaning, said valve be- 85 ing provided with a removable cap 54 for said purpose. Thus it will be seen, that a device for the automatic selling of gasoline is provided, a device that can be located at a distance from the supply, which can be fed 90 by gravity as shown, or by air pressure, and a device that is reasonably safe from others than those who wish to purchase. Furthermore the device being normally empty prevents accidental or mischievous 95 destruction by fire.

Having thus fully described the invention what I claim is:

1. A dispensing apparatus, embodying a pivoted automatic dumping receptacle, an 100 inlet valve, gravity operated means movable independently of said receptacle for opening said valve, a lock for said gravity operated means, a counter-balanced lever for unlocking said lock, and means con- 105 nected to the dumping receptacle for locking said lock.

2. A dispensing apparatus, embodying a pivoted automatic dumping receptacle, a pivoted support therefor, an inlet valve, 110 gravity operated means movable independently of said receptacle for opening said valve, a lock for said gravity operated means, means for unlocking said lock, and means connected to the dumping receptacle 115 for locking said lock.

3. A dispensing apparatus, embodying a pivoted automatic dumping receptacle having a mouth concentric with its pivots, an inlet valve, a spout from said valve pro- 120 jecting into the mouth of said receptacle, means for opening said valve, and means operated by the dumping of the receptacle for operating the valve opening means to allow said valve to close. 125

4. A dispensing apparatus, embodying a pivoted automatic dumping receptacle, a pivoted yoke in which said receptacle is pivoted, means on the yoke to regulate the quantity of liquid to dump the receptacle, 130

an inlet valve, means for opening said valve, and means connected to and operated by the dumping of the receptacle for operating the valve opening means to allow
5 said valve to close.

5. A dispensing apparatus, embodying an inlet valve, means provided with a lock for opening said valve, and a pivoted automatic dumping receptacle adapted to operate said opening means to a locked position to allow said valve to close.
10

6. A dispensing apparatus, embodying

an inlet valve, means provided with a lock for opening said valve, and a pivoted self-righting automatic dumping receptacle 15 adapted to operate said opening means to a locked position to allow said valve to close.

In testimony whereof I affix my signature in presence of two witnesses.

RICHARD TOENNES.

Witnesses:

H. E. SOMBART,

J. W. JONES.

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