C. M. EGGLESTON.

GASOLENE DISPENSER.

APPLICATION FILED APR. 7, 1917.

1,327,425.

Patented Jan. 6, 1920.

2 SHEETS—SHEET 1.

Fig. 1.

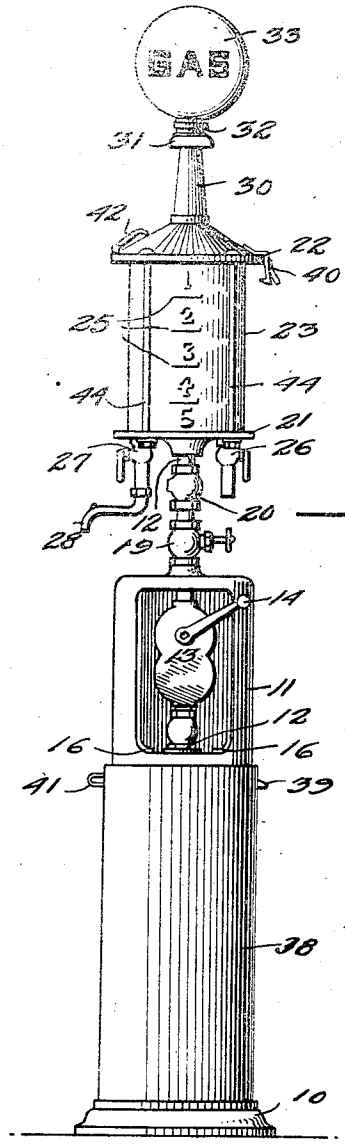


Fig. 2.

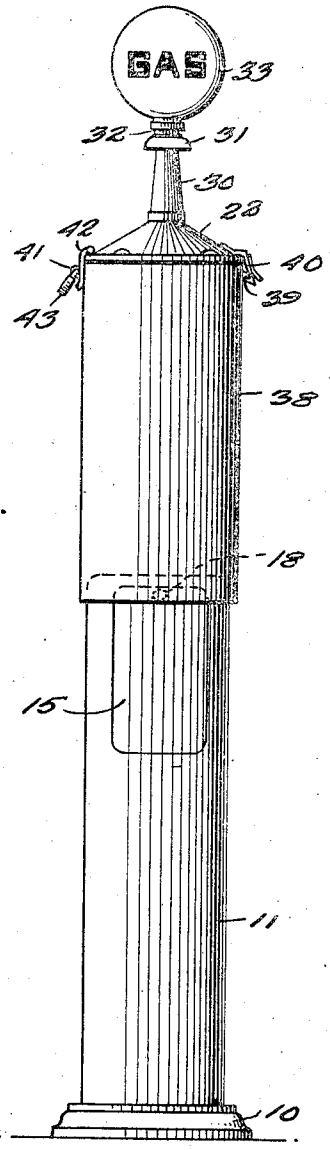
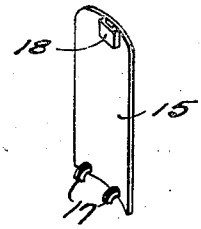


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4.

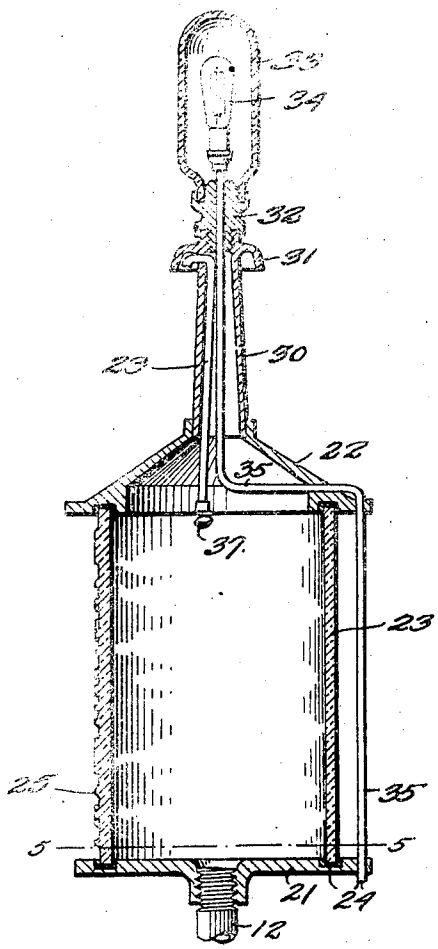


Fig. 5.

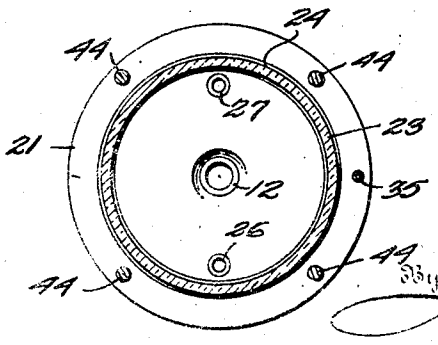


Fig. 6.

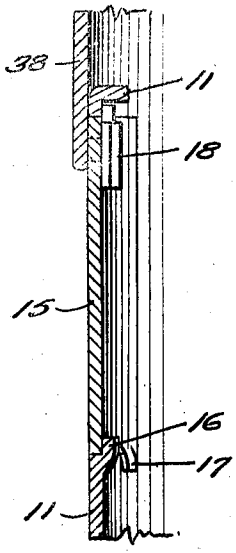
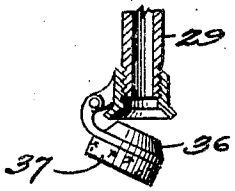


Fig. 7.



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UNITED STATES PATENT OFFICE.

CLAUDE M. EGGLESTON, OF SEARCY, ARKANSAS.

GASOLENE-DISPENSER.

1,327,425. Specification of Letters Patent. Patented Jan. 6, 1920.

Application filed April 7, 1917. Serial No. 160,465.

To all whom it may concern:

Be it known that I, CLAUDE M. EGGLESTON, a citizen of the United States, and a resident of Searcy, in the county of White and State of Arkansas, have invented a certain new and useful Improvement in Gasolene-Dispensers, of which the following is a specification.

The present invention relates to dispensing apparatus, and more particularly to that type adapted to dispense gasolene or the like in predetermined quantities.

An object of the present invention is to provide a dispenser of this character with means whereby the purchaser may readily observe the quantity of fluid delivered, the means providing a convenient and ready measuring device for the same as the latter is delivered from the dispenser.

Another object of the present invention is to provide the dispenser with an improved closing and locking means for securely retaining the valves and other operative parts of the dispenser housed so that access cannot be had thereto when the dispenser is closed and locked.

Various other objects and advantages of this invention, as well as the above, will be in part described, and in part understood from the following detailed description of the present preferred embodiment, the same being illustrated in the drawings wherein:

Figure 1 is a side elevation of a gasolene dispenser constructed according to the present invention, the dispenser being disclosed in open position and ready for use.

Fig. 2 is a similar view showing the dispenser closed and locked.

Fig. 3 is a detail perspective view of the removable panel or door for closing the pump compartment.

Fig. 4 is a detail enlarged view in vertical section through the measuring device and the adjacent parts connected thereto.

Fig. 5 is a transverse section taken through the measuring device shown in Fig. 4, substantially on the line 5—5 thereof.

Fig. 6 is an enlarged fragmentary view in section of the wall of the pump casing, showing the removable panel in position for closing the casing.

Fig. 7 is a detail enlarged view in section of the lower end of the vent pipe.

Referring to these drawings, wherein like parts are designated by similar characters of reference throughout the several views, 10 designates a base provided with an upstanding cylindrical casing 11 adapted to house a riser or feed pipe 12 in the usual manner. The feed pipe 12 is adapted to be extended from a tank or the like which is embedded in the earth in the usual manner, and the base 10 is adapted to be arranged directly thereover. The upper end of the casing 11 comprises a pump housing or casing in which is located a suitable pump 13 which may be operated by a hand crank 14 detachably connected to the pump 13 in the usual manner. The handle 14 may be removed from the pump 13 and placed inside the casing 11 at one side of the pump. The pump housing 11 is provided in one side with an opening which may be closed by a removable panel or door 15, the latter conforming to the curvature of the casing 11.

The casing or housing 11 is provided about the marginal openings therein with a seating flange adapted to engage and retain the panel 15, the latter engaging at its periphery against the marginal edge of the opening. The retaining flange 16 is adapted to engage the inner side of the panel 15, and the latter is provided at its lower end with a pair of inwardly and downwardly inclined lugs 17 for engagement against the inner side of the housing 11 in laterally spaced relation to the flange 16. The upper end of the panel 15 is provided with a lock 18, or the like, the bolt of which is adapted to project upwardly against the inner side of the casing 11 at the upper marginal edge of the opening therein.

The riser 12 is provided, above the pump 13, with a suitable hand-controlled valve 19, and immediately above the valve 19 with a check valve 20 to prevent the downward flow of the fluid through the riser 12 when the pump 13 is at rest. The top of the riser 12 opens into a measuring device for delivering the fluid thereto.

As shown particularly in Fig. 4, the measuring device comprises a lower head 21 to which the riser 12 is connected, an upper head 22, and an intermediately disposed transparent body 23. The inner opposed faces of the heads 21 and 22 are provided with annular depressions or recesses in which packing rings 24 or the like are fitted, the packing rings 24 receiving the opposite end edges of the transparent body 23 there-

against to pack the heads 21 and 22 against the opposite ends of the body of the measuring device. The body 23 of the measuring device is adapted to hold a predetermined quantity of fluid, such as five gallons, and for this purpose is provided at one side with a vertically disposed row of graduations 25 which mark off predetermined quantities, such as one gallon units. The graduations 25 are provided with suitable indicia arranged opposite thereto, and which preferably consecutively increases from top to bottom of the body 23.

The lower head 21 is provided at one side with an outlet faucet 26, to which may be attached any suitable length of hose or the like for conducting the fluid to the desired point of discharge. The lower head 21 may be further provided with a second faucet 27 provided upon its lower end with a delivery spout 28, or the like, adapted to discharge the fluid from the measuring device directly into cans or the like which may be raised into position beneath the spout 28. To exhaust air from the upper end of the measuring device as the fluid is fed upwardly thereinto, a vent pipe 29 arranged in the head 22, is normally open at its lower end, and has its upper end projecting through a post 30 which rises from the head 22. The upper end of the vent pipe 29 is overturned and projects through one side of the post 30 to open to the atmosphere. The post 30 has upon its upper end an overhanging flange 31 adapted to protect the upper end of the vent pipe 29. The upper extremity of the post 30 is internally threaded and is adapted to receive therein the lower end of a coupling block 32 which carries upon its upper end a transparent globe 33 or the like adapted to house an electric bulb 34, or the like which is also supported upon the block 32. A conduit 35 leads downwardly from the bulb 34 through the block 32, the post 30, and through the side of the head 22. The conduit 35 is carried down at one side of the measuring device and is connected in any suitable manner to a source of electric energy in the usual manner.

As shown in Fig. 7, the lower end of the vent pipe 29 may be provided with a valve 36 hinged or otherwise suitably secured at one side of the pipe 29, and provided upon its lower side with a float 37 adapted to be raised by the fluid as the latter rises in the body 23, and when the fluid reaches a predetermined height to close the valve 36. When the valve 36 is closed the air cannot escape from the upper end of the measuring device, and consequently the inflow of the fluid will be retarded.

The dispenser is provided with a hood or closure member 38 which is slidably fitted upon the casing 11, and which is of such length that when raised into the position shown in Fig. 2, the lower end of the hood 28 overlaps the top of the casing 11, and the upper edge of the door or panel 15. It will be noted that the lower end of the hood 38 also overlaps the key slot to the lock 18 so that access thereto cannot be had. The hood 38 is provided at one side with a projection 39 adapted to engage beneath a spring dog 40 which depends from one side of the upper head 22. The hood 38 is provided at its opposite side with a staple 41 adapted to project through a hasp 42 hinged to the opposite side of the head 22, a padlock 43 or the like being secured to the staple 41 for holding the hasp thereto and locking the hood 38 in raised, closed position. Stay bolts 44 are carried through the outer marginal portions of the heads 21 and 22 exteriorly of the body 23 to hold the heads securely thereagainst.

When it is desired to use the dispenser, it is only necessary to release the hasp 42 and the catch member 40 from the hood 38, and to move the latter downwardly over the casing 11. The hood 38 is of such height that when lowered its upper edge lies below the lower edge of the panel 15 so that the latter may be unlocked and removed from the casing. The crank handle 14 is now placed upon the pump 13 and is rotated to feed the gasolene, or other fluid upwardly through the riser 12. The hand valve 19 is adjusted to control the upward flow of the fluid. As the fluid rises in the measuring device 23, the surface level of the fluid may be observed through the transparent wall of the measuring device. As soon as the body 23 is filled with the fluid the valve 36 is closed and as air cannot escape from the upper end of the measuring device the inflow of fluid thereto is retarded. The closing of the valve 36 also offsets evaporation of the fluid. When it is desired to draw off a quantity of the fluid, through the valves 26 or 27, it is only necessary to open one of the valves and to observe the flow of the fluid downwardly through the transparent body 23. When the surface level of the fluid reaches the predetermined indication 25, it is apparent that the predetermined amount of fluid has been delivered through the open valve. In this manner, the purchaser may readily observe from a distance the outflow of the fluid through the open valve, and consequently determine the amount of fluid purchased.

In providing the measuring device or chamber at the top of the dispenser the flow of the fluid therefrom is by gravity and is in a constantly flowing stream which is fed under the required pressure, and which is not intermittently ejected from the valve or hose under relatively great pressure. This prevents the splashing and wasting of a large quantity of the fluid in handling the

same. The device also has the advantage of transferring the fluid from the container tank arranged below the dispenser into the measurer without exposing the fluid to the atmosphere, and the device also insures the correct measurement of the fluid delivered. Even though the check valve 20 and the pump 13 may leak, the same are not relied upon to measure the fluid as the latter is delivered, and there can be no loss of the fluid as the latter would pass back through the different parts into the storage tank.

It is apparent that various changes and modifications may be made in the details of construction of this dispenser without departing from the spirit of the invention, and being restricted only by the scope of the following claims.

I claim:—

1. In a fluid dispenser, the combination with a riser, a glass container adapted to receive and display a large quantity of liquid mounted on the upper end of the riser, a pump interposed in the riser for raising liquid into the container, and discharge means connected to the lower end of the container for withdrawing fluid therefrom, of a casing surrounding the riser and the pump, and a closure member carried by the casing and adapted to be shifted into engagement around said container for inclosing the same.

2. In a fluid dispenser, the combination with a riser, a receptacle mounted on the upper end of the riser, a pump adapted to raise liquid through the riser into the receptacle, and an outlet control connected to the receptacle, of a casing arranged about the riser and the pump, and provided in one side with an opening through which access may be had to the pump, a removable panel for closing said opening in the casing, and a hood slidably engaging over said casing and adapted to be raised about said receptacle and said valve, the lower end of said hood being adapted to overlap the removable panel of the casing for retaining the latter in closed position.

3. In a fluid dispenser, the combination with a riser, a measuring device mounted on the upper end of the riser, a valve connected to the lower end of the measuring device for withdrawing fluid therefrom, and a pump connected to the riser for lifting fluid into the receptacle, of a casing surrounding the riser and the pump and having an opening through which access may be had to the pump, a detachable handle adapted to be projected through the opening in the casing and connected to the pump, a removable panel adapted to close said opening in the casing when the handle is removed, and a hood surrounding said casing and adapted to be raised into engagement about said measuring device to inclose the same and said valve, the lower end of said hood being adapted to overlap the upper edge of said removable panel.

4. In a fluid dispenser, the combination of a riser, a glass container adapted to receive and display a large quantity of liquid mounted on the upper end of the riser, and a discharge valve connected to the lower end of the container, of a shiftable inclosing member adapted for engagement about said container and said valve to inclose the same, and adapted to be dropped into position about the lower end of the riser to expose the container and the valve.

5. In a fluid dispenser, the combination with a riser, a pump interposed in the riser, a transparent receptacle mounted on the upper end of the riser to receive fluid therefrom, and discharging means connected to the lower end of the receptacle for withdrawing fluid from the same, of a casing surrounding the riser and the pump and provided with an opening in one side, a removable panel closing said opening, a detachable handle for the pump adapted to project through the opening when the panel is removed, a lock on said panel for securing the same in position, a hood slidably mounted about said casing and normally lying between the lower marginal edge of said opening, a spring carried upon the upper end of said receptacle, a lip projecting from one side of the hood and adapted for engagement with the spring upon the raising of the hood about said receptacle, and locking means carried upon the receptacle and the hood for securing the latter in raised position to protect the receptacle and discharging means, the lower end of said hood being adapted to overlap said panel and prevent access to the lock thereof.

6. In a fluid dispenser, the combination with a receptacle, means for feeding fluid into the receptacle through its lower end, and a post rising from the receptacle, of a vent pipe extending downward through the post and being overturned at its upper end through one side of the post to open downwardly exteriorly of the post, said bent pipe projecting from the post into the top of the receptacle, a valve hinged upon one side of the pipe and adapted to close the same, and a float connected to the valve for closing it upon the filling of the receptacle to a predetermined height.

7. In a fluid dispenser, the combination with a riser, a glass container adapted to receive and display a large quantity of liquid mounted upon the upper end of said riser, a head removably mounted upon the upper end of said container and provided with an annular flange projecting beyond the container, a pump interposed in the riser for raising liquid into the container, discharge means connected to the lower end of the con-

tainer for withdrawing fluid therefrom, a casing surrounding the riser and the pump, a closure member carried by said casing and adapted to be shifted into engagement around said container for inclosing the same and to have its upper end abutting said flange, a lug carried by the closure member, and a spring dog carried by the head for engagement with the lug.

8. In a fluid dispenser, the combination, of a riser, a transparent receptacle mounted upon the upper end of the riser, a pump interposed in the riser for raising liquid into the receptacles, discharge means connected to the lower end of the receptacle for withdrawing fluid therefrom, a vertical row of graduations on the receptacle having volume indications increasing from top to bottom of the receptacle for designating quantities of liquid delivered from the receptacle, a casing surrounding the riser and the pump, and a closure member carried by said casing and adapted to be shifted into engagement around said receptacle and said discharge means for inclosing the same.

9. In a fluid dispenser, the combination with a riser, a glass container adapted to receive and display a large quantity of liquid mounted upon the upper end of said riser, a head removably mounted upon the upper end of said container and provided with an annular flange projecting beyond the container, a pump interposed in the riser for raising liquid into the container, discharge means connected to the lower end of the container for withdrawing fluid therefrom, a casing surrounding the riser and the pump, a closure member carried by said casing and adapted to be shifted into engagement around said container for inclosing the same and to have its upper end abutting said flange, and means to lock said closure member in a raised position.

10. In a fluid dispenser, the combination with a riser, a glass container adapted to receive and display a large quantity of liquid mounted upon the upper end of said riser, a head removably mounted upon the upper end of said container and provided with an annular flange projecting beyond the container, a pump interposed in the riser for raising liquid into the container, discharge means connected to the lower end of the container for withdrawing liquid therefrom, a casing surrounding the riser and the pump, said casing provided in one side with an opening through which access may be had to the pump, a removable panel for closing said opening in the casing, a closure member carried by said casing and adapted to be shifted into engagement around said container for closing the same and to have its upper end abutting said flange, the lower end of said closure member being adapted to overlap the removable panel of the casing for retaining the latter in closed position.

11. In a fluid dispenser, the combination with a riser, a glass container adapted to receive and display a large quantity of liquid at the upper end of the dispenser, a pump interposed in the riser for raising liquid into the container, and discharge means connected to the lower end of the container for withdrawing fluid therefrom, of a casing surrounding the riser and the pump, and a closure member carried by the casing and adapted to be shifted into engagement around said container for inclosing the same.

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