(No Model.)

T. E. ARMITSTEAD.

FLUID MEASURING VESSEL.

No. 400,386. Patented Mar. 26, 1889.

Fig. 1.

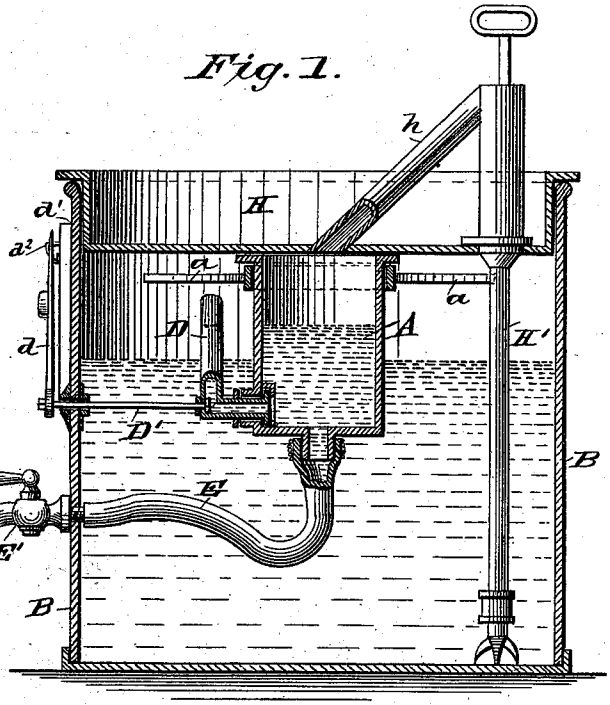


Fig. 6

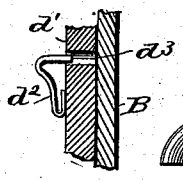


Fig. 2.

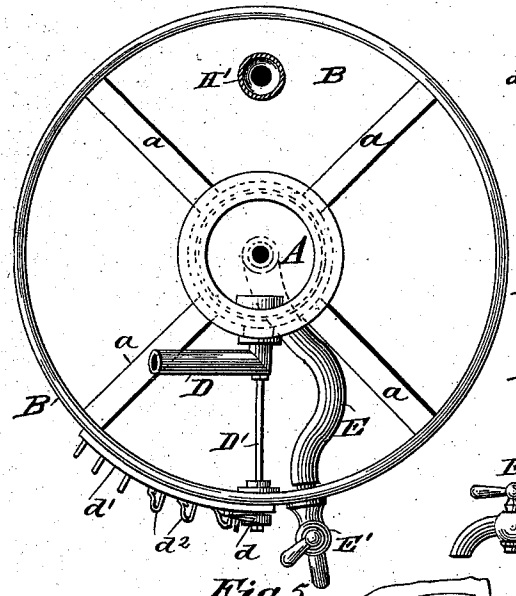


Fig. 3.

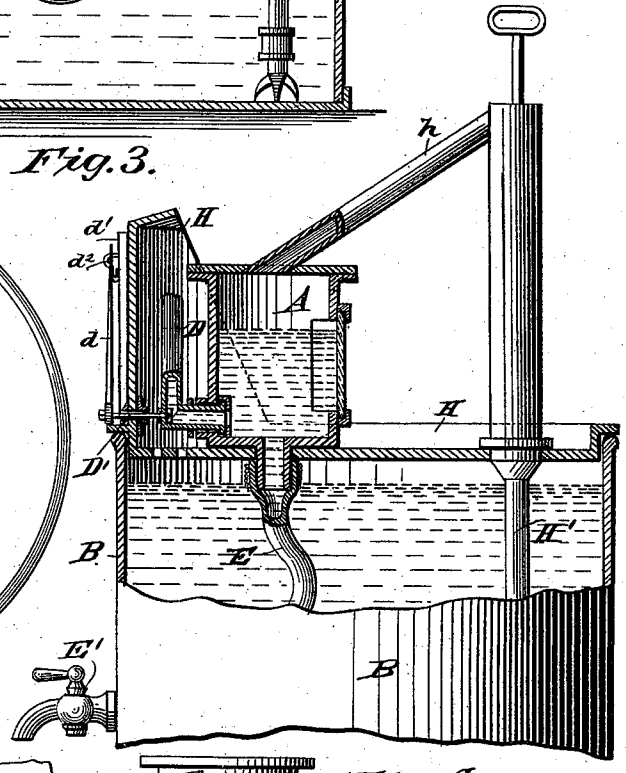


Fig. 5.

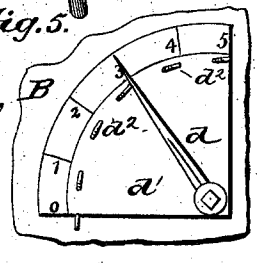
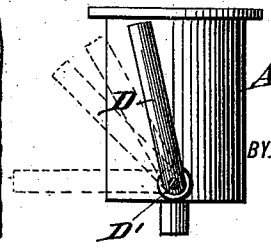


Fig. 4.



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THOMAS E. ARMITSTEAD, OF MAZOMANIE, WISCONSIN.

FLUID-MEASURING VESSEL.

SPECIFICATION forming part of Letters Patent No. 400,386, dated March 26, 1889.

Application filed June 11, 1888. Serial No. 276,692. (No model.)

To all whom it may concern:

Be it known that I, THOMAS E. ARMITSTEAD, of Mazomanie, in the county of Dane and State of Wisconsin, have invented a new and Improved Fluid-Measuring Vessel, of which the following is a full, clear, and exact description.

My invention relates to an improvement in fluid-measuring vessels, and has for its object to provide a simple, effective, and readily-manipulated device, whereby a predetermined amount of fluid may be introduced into a measuring-receptacle and drawn therefrom when desired, and wherein the fluid will not be spilled in the operation, and the measuring at all times be accurately and conveniently effected.

The invention consists in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a central vertical section through the device. Fig. 2 is a plan view of the same with the cover removed. Fig. 3 is a central vertical section of a modification. Fig. 4 is a detail view of the receiving-vessel and liquid level. Fig. 5 is a detail view of the dial and index-finger, and Fig. 6 is a detail section of said dial.

In carrying out the invention a small vessel, A, having an open top or a closed top having an aperture for the admission of a delivery-pipe, is usually suspended within the liquid-tank B, preferably at or near the top, in any well-known or approved manner. The inner vessel, which may be of a size to contain any desired amount—five gallons, for instance—is usually supported by a spider, *a*, and in the lower end of the said vessel, at one side, the horizontal member of an angular tube, D, is held to turn, the movement of which tube is controlled by a horizontal rod, D′, attached to the vertical member, as best illustrated in Figs. 1 and 3. The rod D′ is projected through the walls of the tank and provided with an attached index finger or pointer, *d*, the said pointer being adapted to reciprocate in front of a dial, *d′*, upon the face of which dial a scale of pints, quarts, gallons, or fractions thereof is produced. At each division of the dial a spring-stop, d^2, is attached, consisting, preferably, of an angularly-bent wire having one arm secured to the dial and the other arm free. The latter arm, upon being compressed, enters a suitable aperture, d^3, in the dial, permitting the pointer to pass, as best shown in Fig. 6. A tube, E, which may be of rubber or metal, is attached to the bottom of the inner vessel, A, and also to a faucet, E′, inserted in the side of the tank. A cover, H, is provided for the tank, which may be hooded, if desired, and through the said cover a pump, H′, is projected downward, the upper portion of the pump being connected with the vessel A through the medium of a pipe, *h*, usually fitting in an aperture produced in the cover immediately over the said inner vessel.

In Fig. 3 the receiving-vessel is illustrated as being placed over the tank, the same being concealed, or partially so, by a hood attached to the cover. In this event the dial is placed outside the hood, and, if found desirable, a verifying-dial may be produced in the receiving-vessel by slotting the same and inserting a transparent pane having the scale contained thereon. When the vessel is located as illustrated in Fig. 3, the cover is provided with suitable apertures to permit the passage of the fluid slopping over the tubular level into the tank.

I desire it to be understood that the tank may consist of a specially-constructed receptacle, a barrel, cask, or can, or any liquid-holding vessel.

In operation the pointer is moved across the face of the dial—for instance, to the line indicating a pint. This movement causes the tubular level to incline to such a degree that any amount of liquid above a pint supplied to the vessel A will flow out of the same into the tank. It is readily detected when the proper amount of liquid has been pumped up, as the surplus liquid slopping over produces a peculiar sound. The liquid measured is drawn from the receiving-vessel through the faucet.

Having thus described my invention, what I

claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a tank, of a measuring-vessel carried by the tank, a level-tube pivoted in the side of the measuring-vessel, a pointer connected to the level-tube and working in front of a dial, a pipe leading from the bottom of the measuring-vessel through the tank to a faucet on one side of the said tank, and a pump for pumping the liquid from the tank into the measuring-vessel, substantially as herein shown and described.

2. The combination, with a tank, of a measuring-vessel supported within the tank, an angular tube pivoted in the side of the said vessel, a rod connected to said tube and projecting through the side of the tank, a pointer on the rod, a dial on the tank, a pipe leading from the bottom of the measuring-vessel to a faucet of the tank, and a pump for pumping the liquid from the tank into the measuring-vessel, substantially as described.

3. The combination, with a measuring-vessel, of a level-tube pivoted in the side of the measuring-vessel, a rod connected to the tube, a pointer on the end of the rod, and a dial provided with spring-stops, substantially as described.

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Witnesses:
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