Feb. 27, 1934. S. HARDCASTLE 1,949,387

FLUID DISPENSER

Filed July 29, 1932

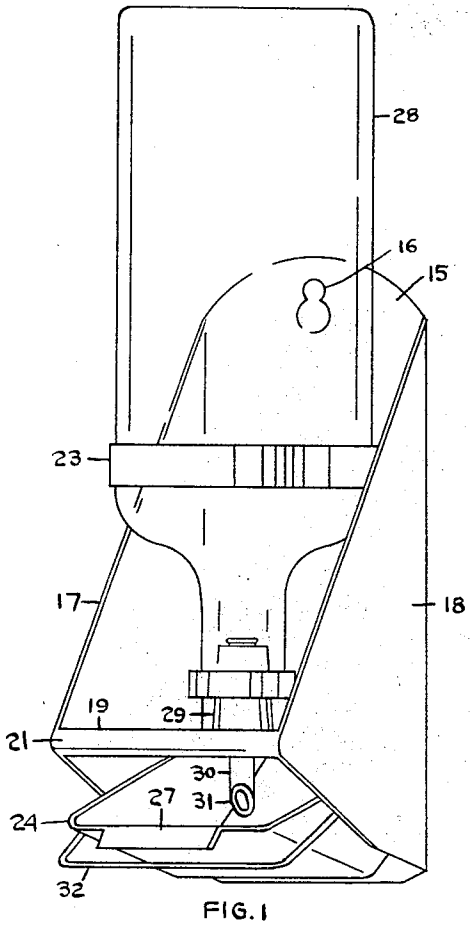


FIG. 1

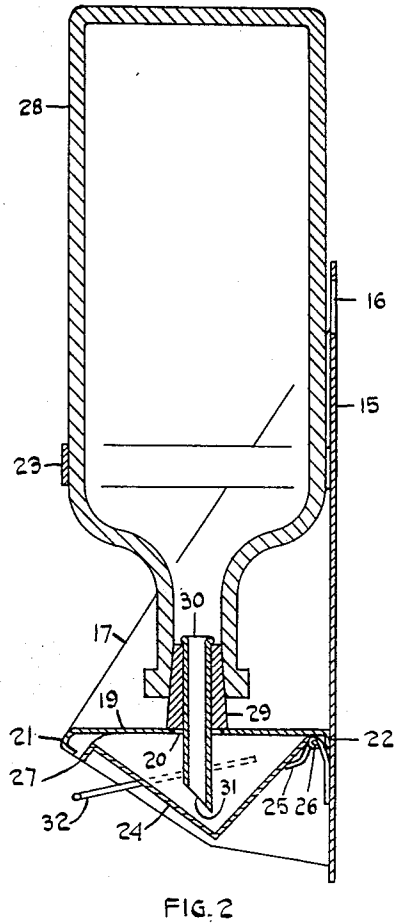


FIG. 2

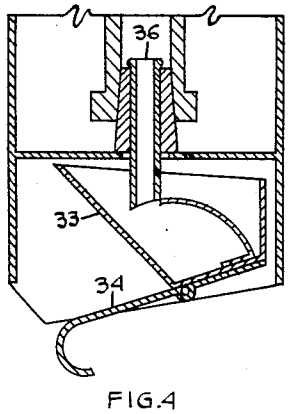


FIG. 4

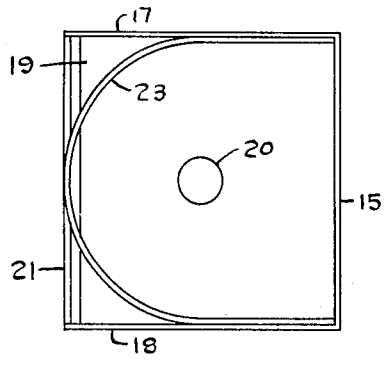


FIG. 3

INVENTOR
S. Hardcastle
BY: E. J. Fetherstonhaugh
ATTORNEY

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FLUID DISPENSER

Sydney Hardcastle, Montreal, Quebec, Canada

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In Canada December 4, 1931

5 Claims. (Cl. 221—94)

The invention relates to a fluid dispenser, as described in the present specification and illustrated in the accompanying drawing that forms part of the same.

The invention consists essentially in the cooperating means for determining the quantities of the discharge in rapid sequence, and in other constructional features leading to the result reached as pointed out in the claims for novelty following a description in detail of some preferred forms of the invention.

The objects of the invention are to furnish to the public a dispenser that will be very useful for measuring various liquids and that may prove a necessary part of the equipment of every bathroom where mouth washes, gargles, antiseptics and other liquids are required; to facilitate the work of nurses in hospitals in measuring doses from washes for patients and in avoiding waste of valuable liquids used in such institutions, and in this connection it may be said that the machine described hereinafter will effect great economy in many directions and its uses are manifold especially in some beverages, not only the right quantity may be told at each operation, but these operations can be repeated and great numbers served in a matter of minutes when otherwise it might take some hours; to construct a dispenser in which the original bottle containing the liquid may be used with great advantage and also that will operate with any readily flowing substance; and generally to provide a dispenser simple and efficient in its operation as well as being economical in the matter of construction.

In the drawing, Figure 1 is a perspective view of the dispenser constructed as a wall bracket showing a bottle mounted therein for pouring purposes and the cup partly open.

Figure 2 is a central vertical sectional view through the bracket, cup and bottle.

Figure 3 is a plan view looking down on the top of the bracket.

Figure 4 is a fragmentary sectional view of a modified form showing the accompanying stopper and an operating lever or handle.

Like numerals of reference indicate corresponding parts in the various figures.

Referring to the drawing, the bracket is shown suitable for suspension on the wall, and has the back, indicated by the numeral 15 and the hanging hole 16 at the upper end of said back.

The sides which taper from the lower end upwardly and are indicated by the numerals 17 and 18 support the shelf 19 in which the central hole 20 is made, this shelf lips downwardly at the front 21 as also the back extends downwardly from the rear end of the shelf from the extension 22.

The strap 23 extends outwardly from the sides 17 and 18 and is made to suit the particular use to which it is put.

The cup 24 is pivotally secured to the back 15 immediately under the shelf 19 and the spring 25 is utilized in the pivot hinge 26 to maintain the cup in its closed position against the bottom face of the shelf 19.

The front lip 27 is turned down on the front side of the cup and this cup is of substantially right-angular shape in longitudinal section, thus the recovery of the cup after discharge much facilitates the stopping of the flow. However this angle may be changed if desirable and furthermore it may be simply in the form of a scoop or spoon.

The bottle 28 is shown with a cork 29 and a tube 30 passing through said cork, this tube ending in the bevelled bottom end 31 which forms with the contents of the cup a liquid seal so that the cup empties quickly before any appreciable quantity can escape from the bottle.

The tube is slidable in the cork, so that it readily disappears for the sealing of the bottle, but it may be left as a part with the machine.

The handle 32 on the cup is in the form of a projecting loop.

In Figure 4 the only difference shown is in the cup portion and this particular cup in the cross sectional shape shows the angle as quite obtuse, so that the cup 33 carries from its rear side the operating lever 34, and in discharging the arcuate stopper is moved over the correspondingly shaped end of the tube 36 which is only necessary where the doses or quantities must be so precise as not even to miss a drop.

Briefly the operation in this invention is the pulling down of the handle so that the cup must deliver its contents. The cup cannot move down beyond the back, therefore there can be no great loss of liquid for it closes up immediately.

Of course this operation may be applied in places where the addition of locking devices is desirable for individual use or even in coin operated mechanism, but the invention in the illustration and in the description only includes the actual dispensing device which is simple to the extreme and yet very effective in use.

What I claim is:—

1. A fluid dispenser comprising a bracket forming a vessel holder and having a passage therefrom for the liquid from the vessel, said bracket

having means for suspension centrally located on the back above the centre of gravity, a cup closing up to said bracket and communicating with said passage.

2. A fluid dispenser comprising a bracket forming a vessel holder and having a passage therefrom for the liquid from the vessel, said bracket having means for suspension centrally located on the back above the centre of gravity, a cup closing up to said bracket and communicating with said passage, a handle having its outer extremity centrally located under the lip of the said cup and pivotally secured to the bracket at a point higher than the outer extremity of the handle.

3. A fluid dispenser comprising a bracket forming a vessel holder and having a passage therefrom for the liquid from the vessel, said bracket having means for suspension centrally located on the back above the centre of gravity, a cup closing up to said bracket and communicating with said passage, a handle in loop form attached at the ends to said cup and the central part of the loop passing below the spout of the cup and defining a position midway of the width of the cup.

4. A fluid dispenser comprising a bracket forming a vessel holder and having a passage therefrom for the liquid from the vessel, said bracket having means for suspension centrally located on the back above the centre of gravity, a cup closing up to said bracket and centrally located on said back and communicating with said passage, a handle on said cup below the spout and shaped to centre under the spout a receptacle placed against it, the lower extremity of said back being substantially as wide as the projection of the cup from the back.

5. A fluid dispenser comprising a bracket forming a vessel holder and having a passage therefrom for the liquid from the vessel and a cup closing up to said bracket and communicating with said passage, and a closure operating with the cup and slidably engaging the lower end of said passage when the cup is in a pouring position.

SYDNEY HARDCASTLE.