J. McPHERSON, Jr.

LIQUID DISPENSING APPARATUS.

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1,068,067.

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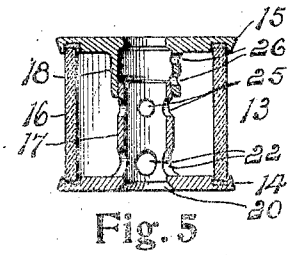


Fig. 5

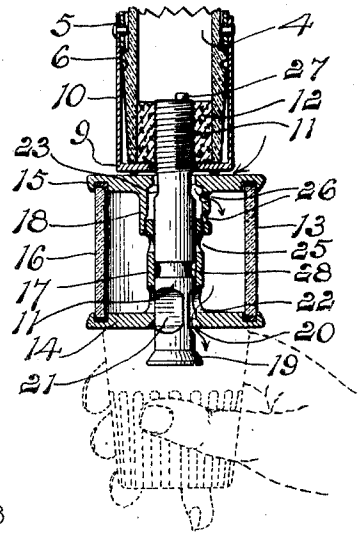


Fig. 3

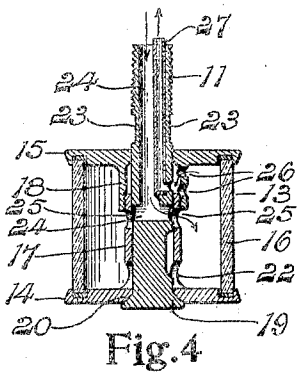


Fig. 4

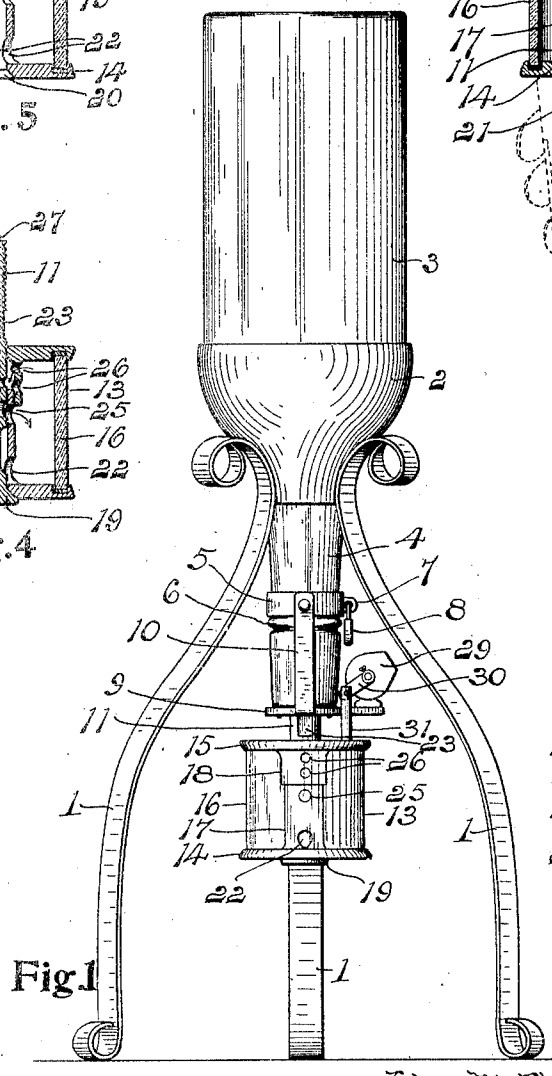


Fig. 1

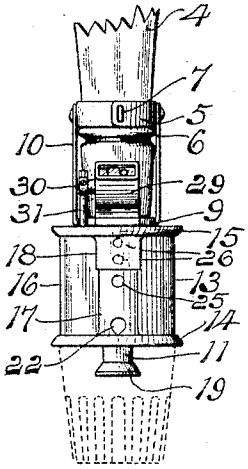


Fig. 2

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UNITED STATES PATENT OFFICE.

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LIQUID-DISPENSING APPARATUS.

1,068,067. Specification of Letters Patent. Patented July 22, 1913.

Application filed November 27, 1911. Serial No. 662,544.

To all whom it may concern:

Be it known that I, JOHN McPHERSON, Jr., a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Liquid-Dispensing Apparatus, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a fluid measuring device especially adapted for use in dispensing liquor from a bottle or similar receptacle, and its object is to provide a simple device for holding the receptacle in position to draw fluid therefrom and means for delivering measured quantities of the liquor. A further object is to provide a device which is convenient to operate and attach, and to combine therewith a register in such a manner that the same will be operated each time a measured quantity of the liquor is drawn.

It is also an object of the invention to provide certain other new and useful features in the construction and arrangement of parts, all as hereinafter more fully described reference being had to the accompanying drawing in which,

Figure 1 is a side elevation of a device embodying the invention; Fig. 2 is a similar view of the measuring device attached to a portion of the neck of the bottle and showing the device in position to discharge a measured quantity of fluid; Fig. 3 is an enlarged vertical section of Fig. 2; Fig. 4 is a vertical section of the measuring device detached from the bottle neck and in closed position; and Fig. 5 is a vertical section through a measuring cup detached.

As shown in the drawing, a suitable stand for holding a bottle is provided comprising suitable legs 1 secured at their upper ends to a cup or bowl 2 which is shaped to receive a bottle 3 in inverted position with the neck 4 of the bottle projecting through the open bottom of the bowl.

A measuring device is attached to the bottle neck by a strap 5 secured around the neck above a bead 6 thereon by having an outturned end 7 adapted to engage an opening in the opposite end of the strap. This outturned end 7 is provided with a hole to receive a suitable lock or seal 8 so that the device may not be removed from the bottle by an unauthorized person, or the bottle removed from the stand. A plate 9 is held against the end of the bottle neck by means of straps 10 secured thereto or formed integral therewith at one end and at their opposite ends secured to the band 5. This plate 9 is formed with an axial opening through which extends a stem 11 having an externally screwthreaded upper end engaging an axial opening in a cork 12 fitting within the neck of the bottle and held therein by the plate 9. A measuring cup 13 is mounted upon the stem 11 to slide freely thereon toward and from the plate 9 and this cup is formed with a lower head 14 and an upper head 15 between which a cylindrical glass body 16 is clamped by forming the lower head 14 with an integral axial tubular portion 17 and the head 15 with a similar tubular member 18, the tube 17 being externally screwthreaded at its upper end to engage an internal screw thread on the tube 18. The lower end of the stem 11 is formed with a valve 19 to engage the valve seat 20 formed in the bottom 14 and the stem is cut away upon three sides at 21 a short distance above the valve to permit the liquor contained within the cup to escape through openings 22 in the tube 17 adjacent to the bottom, and out through the cut away portions 21 past the valve seat when the cup is raised to disengage the valve from its seat. The stem is also cut away at 23 adjacent to the plate 9 so that air may enter the upper end of the cup around the stem when the cup is raised to discharge its contents.

When the cup is in lowered position and the discharge valve closed, liquor from the bottle is permitted to flow into the cup through a passage 24 formed by boring the stem inward from its upper end and then transversely so that the passage opens laterally at its lower end through the sides of the stem. Openings 25 are provided in the tube 17 to register with the inner end of the passage 24 and permit the escape of the liquor from the passage into the receptacle. Air contained in the receptacle escapes through openings 26 in the tube 18 and thence upward through a vent pipe 27 in the stem into the bottle. A groove 28 is cut in the exterior of the stem and the passage 24 opens into this groove so that said passage will be in communication with the openings 25 when the cup is lowered no matter to what position it may be turned. When the cup is in raised position as shown in Fig. 3 to open the valve and permit the liquor in the cup to discharge into a glass

held in contact with the lower end of the cup, said groove 28 will be in such a position relative to the tube 17 that the lower end of the passage 24 will be closed by the tube thus preventing the escape of liquor from the bottle into the cup.

Mounted upon a lateral extension of the plate 9 is a registering device or counter 29 of any suitable construction which is operated by an arm 30 on its shaft pivotally connected to the upper end of a post 31 secured to the head 15 of the measuring cup.

When the cup is raised to discharge its contents by bringing a glass into engagement with its lower head, the post 31 will be raised also and will actuate the counter or register. By means of this counter the number of times which the cup has been discharged of its contents is readily ascertained.

Obviously changes in the details of construction and arrangement of parts may be made without departing from the spirit of my invention and I do not wish to limit myself to any particular construction or arrangement of parts.

What I claim is:—

1. A device of the character described comprising a measuring cup, means for attaching the cup to the neck of a bottle comprising a strap secured to the neck of the bottle, a plate engaging the end of the bottle neck, arms connecting the plate and strap to hold the plate in place, means for supporting a bottle in inverted position, means for controlling the inlet of fluid from a bottle to the cup and its discharge from the cup said means being controlled as to its action by a vertical movement of the cup, a registering device supported upon said plate, and means carried by the cup for operating the registering device when the cup is moved vertically.

2. A device of the character described comprising means for supporting a bottle in an inverted position, a measuring cup, means for attaching said cup to the neck of the bottle to receive fluid therefrom, means adapted to be secured within the bottle neck for controlling the inlet of fluid to said cup from the bottle and its discharge therefrom by a vertical movement of the cup on said means, a registering device carried by the means for attaching the cup to the bottle neck, and a member on the cup for operating the registering device when the cup is moved vertically to admit fluid thereto from the bottle.

3. In a device of the character described, the combination of means for supporting and holding a bottle in inverted position, a measuring cup, means adapted to be secured in the neck of a bottle and passing through said cup to control the admission of fluid to the cup and its discharge therefrom and serving to attach said cup to the bottle neck in position to receive fluid therefrom, the action of said controlling means being governed by a movement of the cup longitudinally thereon toward the end of the bottle neck, a plate, means for securing said plate to the lower end of the bottle neck with said controlling means extending therethrough into the neck, and a registering device supported upon said plate and having connection with said cup to be operated thereby when the cup is raised to permit the fluid contained therein to escape.

4. In a device of the character described, the combination of means for supporting and holding a bottle in inverted position, a measuring cup, means adapted to be secured in the neck of a bottle and passing through said cup to control the admission of fluid to the cup and its discharge therefrom and serving to attach said cup to the bottle neck in position to receive fluid therefrom, the action of said controlling means being governed by a movement of the cup longitudinally thereon toward the end of the bottle neck, and means for securing said controlling means on the lower end of the bottle neck with said controlling means extending therethrough into the neck.

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

JOHN McPHERSON, Jr.

Witnesses:
LEWIS E. FLANDERS,
ANNA M. DORR.