Aug. 1, 1939. B. SLIPIKAS 2,168,050

APPORTIONING DEVICE

Filed March 23, 1938

Fig. 1

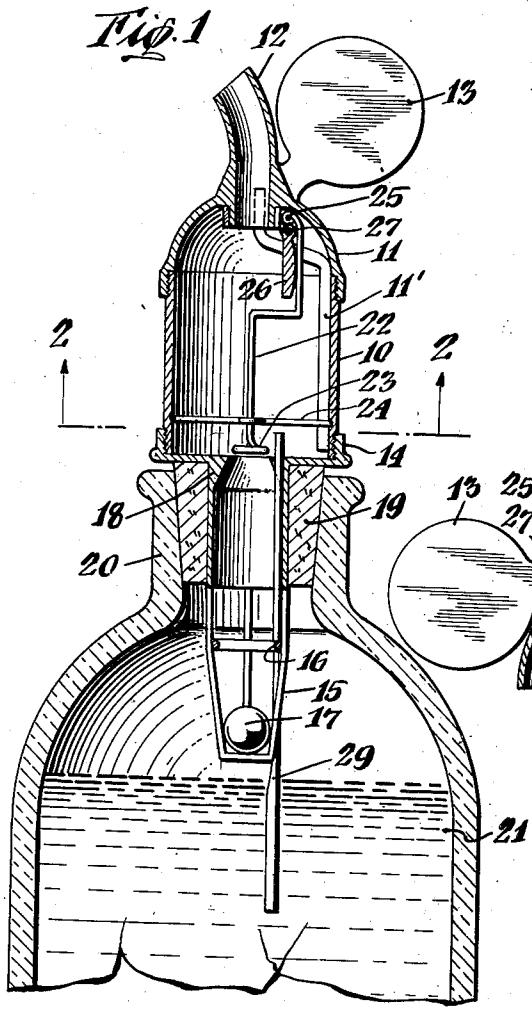


Fig. 3

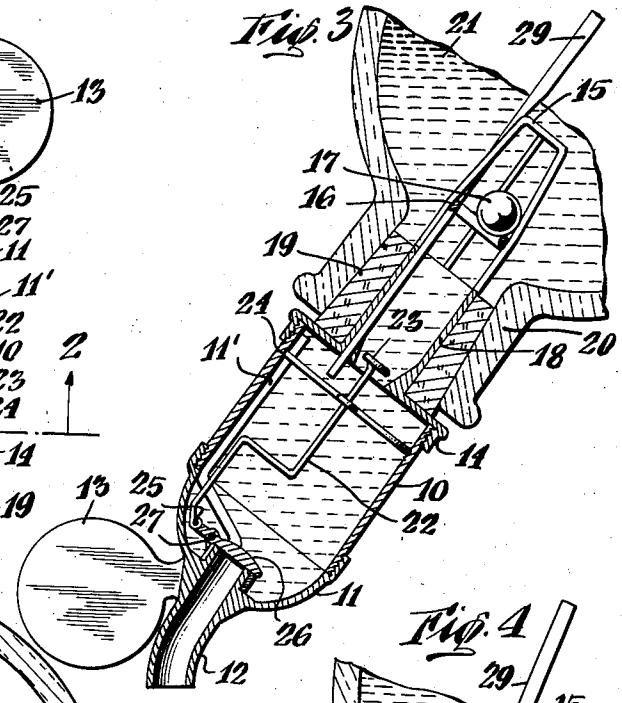


Fig. 4

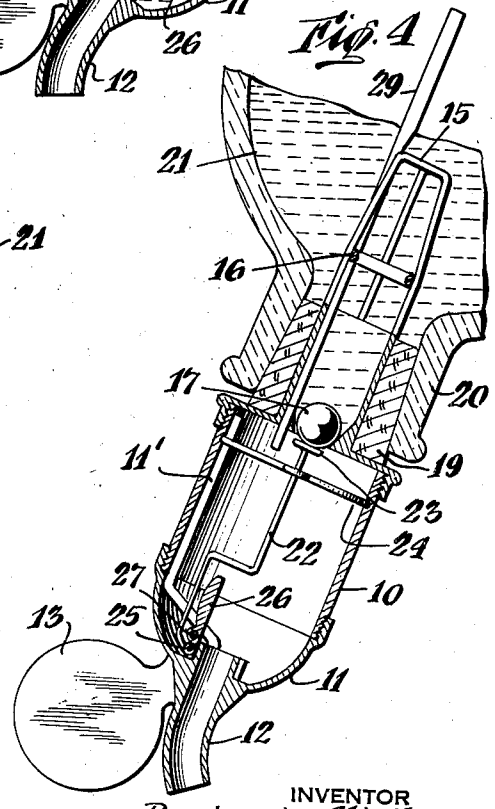
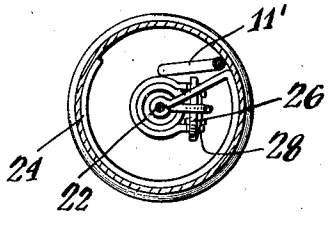


Fig. 2



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APPORTIONING DEVICE

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2 Claims. (Cl. 221—147)

My invention relates to improvements in apportioning devices, particularly intended for the dispensation of fluids, and it is the principal object of my invention to provide a device of this character which permits the measuring of a certain quantity of the fluid to be dispensed thereby, as in mixing said fluid with other fluids, as for instance whiskey poured from a bottle to be used in certain quantities in the making of cocktails or the like.

Another object of my invention is the provision of an apportioning device of this character equipped with means adapted to contain in its body a predetermined amount of fluid, and provided with valves operating the discharge closure of the bottle and also opening the dispensing spout of the device.

A further object of my invention is the provision of an apportioning device in which a ball, normally held within its cage, is lowered when the fluid containing bottle is inclined to a certain degree to operate a valve normally held closed to allow a dispensation of the quantity of fluid poured into the measuring vessel for mixing or other purposes.

A still further object of my invention is the provision of an apportioning device including a graduated body into which the fluid from a bottle is poured and in which a wire is located having at one end a seat for the ball valve and at its opposite end a closure for the dispensing snout of the body held in its closing position until the ball on its seat closes the bottle mouth and opens the closure.

Still another object of my invention is the provision of an apportioning device of a comparatively simple and inexpensive construction adapted to fit various sizes of bottles, yet durable and highly efficient in use.

These and other objects and advantages of my invention will become more fully known as the description thereof proceeds, and will then be more clearly defined in the appended claims.

In the accompanying drawing forming a material part of this disclosure:

Fig. 1 is a fragmentary, vertical section through a bottle and its neck with an apportioning device constructed according to my invention thereon before use.

Fig. 2 is a section on line 2—2 of Figure 1.

Fig. 3 is a fragmentary sectional view of a bottle and its neck in somewhat inclined position illustrating the parts of the device in position of pouring liquid from the bottle into the apportioning body, the discharge spout of which is closed.

Fig. 4 is a view similar to Figure 3 with the bottle at the correct angle for allowing a discharge of the measured quantity of fluid from the apportioning body while the bottle mouth is closed.

As illustrated, the device comprises a substantially cylindrical body 10 the outer mantle of which may be suitably graduated to indicate its fluid capacity, and which is closed at one end by a screw cap 11 having an air hole connected with a vent pipe 11′ within body 10 and ending therein, while a spout 12 is made integral with the said cap 11 to allow the discharge of the measured fluid from the body, and a handle 13 on said cap 11 permits a convenient handling.

The other end of the body 10 is also closed by means of a screw cap 14 having formed therewith a cage 15; intermediate the ends of said cage a rest 16 for a ball 17 is arranged allowing however the dropping of the ball therefrom when the device is inclined at a certain angle for instance 45°, as illustrated in Figure 4. The shank 18 of the cap 14 carrying the cage 15 is passed through the cork 19 closing the mouth of a bottle neck 20, the bottle being designated 21. In cap 14, body 10 and cap 11 a spring wire 22 is held having at one end a seat 23 formed therewith, while the spring rod or wire 22 is slidably guided through a loop formed in a guide wire 24 engaging and guided about the inner face of the body 10 as in Figure 2. The wire 22 has formed a knee in body 10 intermediate its ends and its end opposite to the seat 23 is pivotally attached, as at 25, to the end tongue of a cover plate 26 which is pivoted, as at 27 to a bracket 28 in the body's cap 11. A flow channel 29 extends through the cage into the bottle at one end and into the body 10 at its other end.

The device operates as follows:

As shown in Figure 1, in the upright position of the bottle equipped with the apportioning device, the ball 17 rests at the end of the cage 15, while the cover 26 hangs down and the wire 22 with its seat 23 remain inside the body 10 and its caps. If now the bottle is inclined to assume the position illustrated in Figure 3, the ball 17 will fall upon the rest 16, the cover 26 will close the mouth of the spout 12, and the seat 23 will be in the bottle mouth being displaced by the weight of the cover 26. Upon a further inclination of the bottle into the position illustrated in Figure 4 to an angle which has been previously determined, as for instance 45°, the ball 17 will leave its rest and fall upon the seat 23, and the communication with the bottle and body that

has been previously filled from the bottle will be closed, while the depression of the wire **22** will tend to open the cover **26** of the spout, so that now the amount of fluid contained in the body can be dispensed through the spout.

It will be clear that I have described and shown the preferred form of my device only as one example of the many possible ways to practically construct the same, and that I may make such changes in its general construction and in the minor details thereof as come within the scope of the appended claims without departure from the spirit of my invention and the principle involved.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In an apportioning apparatus as described particularly for measuring liquid poured from a bottle into a glass a graduated container having a spout and a vent opening, a cap on said container with which said spout is formed, and a perforated cap closing the other end of said container, a ball valve for regulating the quantity of liquid supplied to said container, a vent pipe communicating with said vent opening and the container, a cover for said spout hinged intermediate its ends to the wall of said container, an operating wire pivotally secured at one of its ends to one end of said spout cover, a valve seat at the other end of said wire, said wire movably guided in said container to extend into the bottle neck at a certain inclination of same and closing the spout cover, a cage for the ball of said valve, formed with said closing cap of the container, an intermediate ball rest in said cage on which the ball is preliminarily seated during the filling of said container with the bottle held tilted to a certain predetermined angle, and through which the ball can fall upon further tilting of the bottle to rest on said wire valve seat to close the communication between bottle and container and to open the cover of said spout to allow a dispensation of the liquid from said container.

2. The combination of a bottle and its neck closed by a perforated stopper with a graduated container for a predetermined quantity of a liquid poured from said bottle into said container, a ball valve normally permitting the filling of the container with said liquid, an operating wire guided slidably in said container and having a valve seat at one end, a cage for said ball valve adapted to be inserted into said bottle through the perforation in said stopper, an intermediate ball rest in said cage, a spout for said container and a cover for said spout movably attached to said operating wire, said ball valve gradually sliding down in its cage to an intermediary rest upon the inclination of the bottle, and said wire with its seat during this time entering the bottle neck and closing the spout by its cover, while during a further inclination of the bottle to a predetermined degree the ball slides from its intermediate rest upon said seat and depresses the operating wire to close the communication between bottle and container and to open the spout closure for the dispensation of the measured quantity of liquid from said container.

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