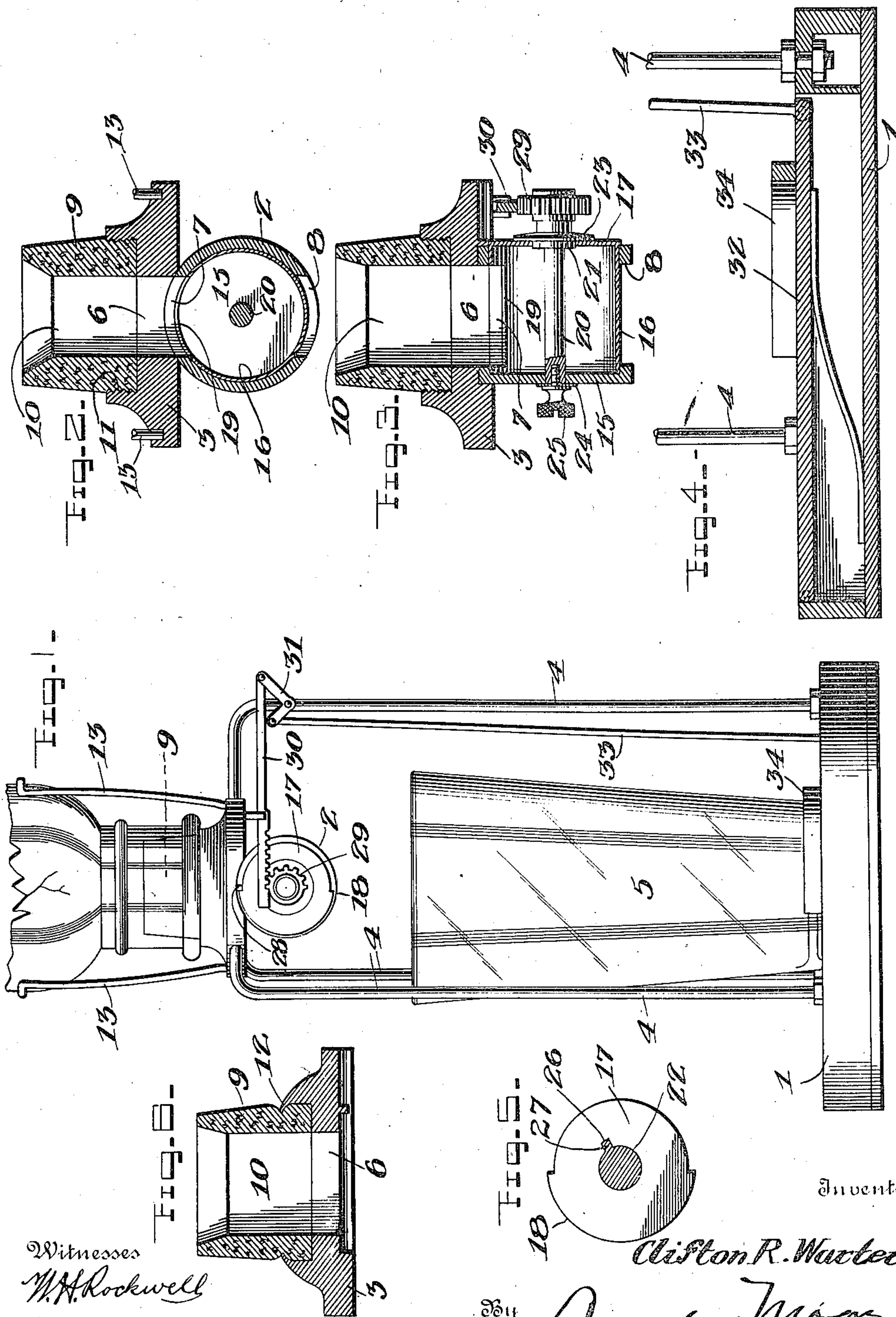


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DISPENSING APPARATUS.
APPLICATION FILED DEC. 30, 1909.

963,342.

Patented July 5, 1910.



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CLIFTON R. WARTERS, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR OF
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DISPENSING APPARATUS.

963,342.

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To all whom it may concern:

Be it known that I, CLIFTON R. WARTERS, a citizen of the United States, residing at Washington, in the District of Columbia, have invented new and useful Improvements in a Dispensing Apparatus, of which the following is a specification.

This invention relates to improvements in dispensing apparatus and more particularly to an apparatus used in mixing and dispensing effervescing beverages.

It is the object of this invention to provide a standard supporting a dispensing chamber in connection with a reservoir above the base of the apparatus a sufficient distance to allow the placing of a glass upon the base beneath the dispensing chamber. The standard is supplied with a mechanism for operating the dispensing chamber, which is actuated by the placing of a glass upon the base.

In this dispensing apparatus, a bottle containing bromo-seltzer or other effervescing salts or other material may be placed in direct communication with the dispensing chamber which forms an air tight closure for the mouth of the bottle. The glass containing the water is placed directly beneath the dispensing chamber which may be operated by a single movement to dispense a given quantity of the effervescing salt, which instantly drops into the glass, mixes with the water, and produces the complete beverage. The advantages of such a construction are many. The simplicity of the operation is a great time saver to the operator. The entire apparatus takes up but little more space than the ordinary bottle, the waste occasioned by careless dispensers is prevented and the given amount of the effervescing salt is constant with each glass of the beverage prepared by this apparatus.

While the preferred form of this invention is illustrated upon the accompanying sheet of drawing, yet it is to be understood that minor detail changes may be made without departing from the scope thereof.

Figure 1 is a view in side elevation illustrating the complete apparatus. Fig. 2 is a view in longitudinal section taken through the dispensing chamber. Fig. 3 is a view in section taken at right-angles to Fig. 2 through the dispensing chamber. Fig. 4 is a view in longitudinal section taken through the base of the apparatus. Fig. 5 is an en-

larged detail view. Fig. 6 is a view in section of a modification.

The base 1 is preferably circular in shape, and is formed of wood, metal, or any other desirable material. The dispensing chamber comprises a cylindrical casing 2 secured on the under side of the circular standard 3, which is supported directly above the center of the base by a plurality of braces 4. These braces, preferably three in number, extend outward from points equidistant upon the circumference of the dispensing chamber standard 3, and are then bent downward at right-angles with their lower extremities secured to the base member 1. The dispensing chamber is supported upon these braces a sufficient distance above the base to allow the insertion of a tall glass thereunder.

The dispensing chamber standard 3 is provided with a central opening 6 and the cylindrical casing 2 of the dispensing chamber is provided with a corresponding opening 7 where it joins the standard 3. A similar opening 8 is provided on the lower side of the cylindrical casing diametrically opposite the upper openings 6 and 7. The upper portion of the standard is recessed for receiving and securing thereto a bottle connector 9. The bottle connector 9 may be of cork, rubber, wood, or any other desirable material, and is provided with an opening 10 through the center thereof which corresponds with the openings 6 and 7 in the standard and dispensing chamber walls. The bottle connector may be secured to the standard 3 by forming screw threads 11 upon the inner walls thereof, as shown in Fig. 2, or may be secured in place by bending inward the upper portion 12, as shown in Fig. 6. A plurality of equidistant spring members 13 are preferably carried upon the upper side of the standard 3 and extend upward a sufficient distance to support a bottle in place between them. The cylindrical casing 2 of the dispensing chamber is closed at one end 15, as shown in Fig. 3. A hollow cylindrical valve member 16 is mounted to rotate within the casing 2. This valve member is closed at one end, the closure 17 extending beyond the side walls in the form of a flange 18 throughout one-half of the circumference, which will engage the side walls 2 of the dispensing chamber when inserted in the open end thereof, the side walls 16 of

the cylindrical valve member engaging the closed end 15 of the dispensing chamber. The valve member is provided with an opening 19 corresponding with the opening 6 through the dispensing chamber standard, and is secured in position by a rotating shaft 20 passing through the center of the end 17 of the cylindrical valve and closed end 15 of the dispensing chamber. This shaft extends beyond the valve and is provided with a circular shoulder 21 adapted to be received in a circular opening 22 in the closed end 17 of the valve with an outstanding flange 23 on the exterior thereof, which is held in engagement therewith by the spring washer 24 and securing nut 25 on the opposite end of the shaft 20 on the exterior of the closed end 15 of the dispensing chamber. The circular opening 22 in the closed end 17 of the valve is provided with a rectilinear opening 26 extending therefrom, as shown in Fig. 5. The cylindrical shoulder 21 upon the rotating shaft is provided with an outstanding lug 27 which is adapted to be received in this rectilinear opening 26 in the closed end of the valve and thereby cause the valve to rotate with the shaft. A stop 28 is provided upon the end wall of the cylindrical dispensing chamber adapted to be engaged by the semicircular flange 18 extending outward from the closed end of the valve, which will allow but one-half of a complete revolution in either direction.

The opening 19 in the side wall of the valve member corresponding with the opening in the standard is so arranged in relation with the outstanding flange 18 and stop 28 that when one end of the flange is in engagement with the stop, the opening will register with the openings through the upper portion of the wall of the dispensing chamber, the standard and bottle closure, so that a direct communication will be made between the reservoir or bottle containing the effervescing salt supported above the standard and the interior of the cylindrical valve chamber. When the valve chamber is rotated until the opposite end of the semicircular flange 18 will be in engagement with the stop 28, the opening 19 in the chamber will then register with the lower corresponding opening 8 in the walls of the dispensing chamber. When in this position, the upper opening 7 will be entirely closed and the contents of the valve will be discharged.

The exterior end of the rotating shaft 20 is provided with a pinion 29, which is adapted to be engaged by a rack bar 30. The opposite end of the rack bar 30 is pivoted to one end of a bell crank lever 31, which in turn is pivoted at the point of jointure of the two arms to one of the support braces 4. The upper portion of the base 1 is recessed, as shown in Fig. 4. A spring pressed plat-

form 32 pivoted at one end of the base normally lies flush with the upper surface thereof. A connecting link 33 is pivoted at the upper end to the bell crank lever 31 opposite the connection with the rack bar, and at the lower end to the free end of the spring pressed platform 32. The platform is provided with an upstanding glass guide or stop 34.

The operation of this device is as follows. The bottle containing the effervescing salt is placed over the bottle connector upon the standard, and, as the parts are in the position shown in Figs. 1 and 2, a direct communication is formed between the contents of the bottle and the interior of the cylindrical valve member. A glass containing water is then placed upon the base, and its weight, aided if necessary by the pressure from the hand of the operator, will depress the pivoted platform which will in turn, through the pivoted link and bell crank lever, move the rack bar inward, and rotate the valve member until the opening therein registers with the lower opening in the casing, and thereby discharge a given quantity of the effervescing salt into the glass containing the water and producing the complete beverage. As soon as the glass is removed from the platform, the springs will force it up again to its normal position, and this will retract the rack bar and rotate the cylindrical valve member until the opening therein registers with the opening communicating with the interior of the bottle.

What I claim is:—

1. In a dispensing apparatus, a base having a movable portion thereon, a reservoir and dispensing chamber in direct communication with each other supported above the base, a discharge opening in the chamber, a valve, and automatic means to operate the valve to close the communication between the chamber and reservoir and at the same time discharge the contents of the chamber, actuated by placing a glass upon the movable portion of the base.

2. In a dispensing apparatus, a base having a movable portion thereon, a reservoir and dispensing chamber in communication with each other supported above the base, a dispensing valve, a discharge opening provided in the dispensing chamber, means connected with the movable portion of the base to operate the valve to close the communication between the chamber and reservoir and discharge the contents of the chamber.

3. In a dispensing apparatus, a base, a recess provided upon the upper side thereof, a spring pressed platform mounted therein normally flush with the upper surface, a dispensing chamber and standard supported by braces above the center of the base, a reservoir detachably supported above the standard, a means of direct communication

between the interior of the reservoir and the interior of the chamber, a discharge opening provided in the underside of the chamber corresponding therewith, a hollow cylindrical valve engaging the walls of the chamber provided with a single opening corresponding with the openings in the chamber, a rotatable shaft passing through and secured to the valve rotatably mounted in the chamber, a pinion on the shaft exterior of the valve, a rack bar, a bell crank lever centrally pivoted upon one of the braces, a pivotal connection between one arm of the lever and the rack bar, and a link pivoted at one end to the other end of the lever and at the other end to the platform.

4. In a dispensing apparatus, a base, a dispensing chamber, a standard supporting said chamber above the base, a detachable reservoir supported upon an air tight connector therefor secured to the standard, an opening provided centrally through the connector, standard, and chamber, a rotatable hollow cylindrical valve mounted in said chamber provided with a single opening corresponding to the openings in the chamber, a shaft centrally secured in the valve and rotatably mounted in the chamber, a pinion mounted on the exterior part of the shaft, a rack bar in engagement therewith, a spring pressed platform mounted in a recess upon the base, and means for reciprocating the rack bar actuated by the movement of the pivoted platform.

5. In a dispensing apparatus, a bottle supporting standard, comprising a flat base with a stand having a plurality of braces engaging the base and supporting the stand above the base whereby a glass may be placed upon the base beneath the stand, in combination with a cylindrical dispensing chamber and valve secured upon the under side of the stand and a bottle connector supported upon the upper side of the stand.

6. In a dispensing apparatus, a bottle supporting standard, comprising a flat base with a stand having a plurality of braces engaging the base and supporting the stand above the base whereby a glass may be placed upon the base beneath the stand, in combination with a hollow cylindrical dispensing chamber casing secured upon the under side of the stand, a cylindrical valve within the chamber, a shaft centrally located within the chamber rotatably mounted in one part of the chamber wall and rigidly secured to a portion of the valve wall, means for rotating the shaft for operating the valve, and a bottle connector supported upon the upper side of the stand.

7. In a dispensing apparatus, a bottle supporting standard comprising a flat base with a stand having a plurality of braces engaging the base and supporting the stand above the base whereby a glass may be placed upon the base beneath the stand, in combination with a cylindrical dispensing chamber and valve secured to the under side of the stand, and a bottle support and connector secured upon the upper side of the stand adapted to enter within and engage the inner walls of the bottle.

8. In a dispensing apparatus, a bottle supporting standard comprising a flat base with a stand having a plurality of braces engaging the base and supporting the stand above the base whereby a glass may be placed upon the base beneath the stand, in combination with a cylindrical dispensing chamber and valve secured to the under side of the stand, a bottle connector supported upon the upper side of the stand and a plurality of resilient bottle supports secured to the upper side of the stand.

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