

(No Model.)

C. E. WESTLAKE & A. WAGGONER.
COIN CONTROLLED LIQUID VENDING APPARATUS.

No. 497,107.

Patented May 9, 1893.

Fig. 1.

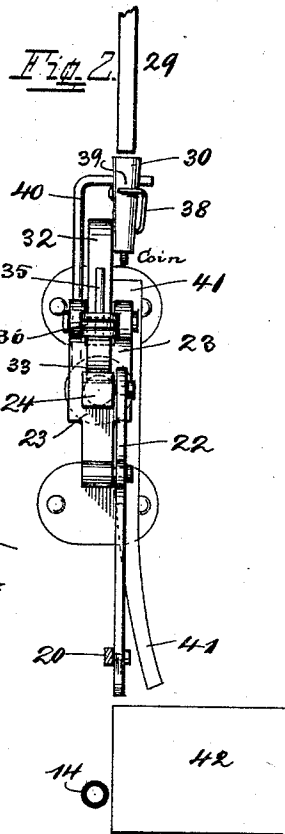
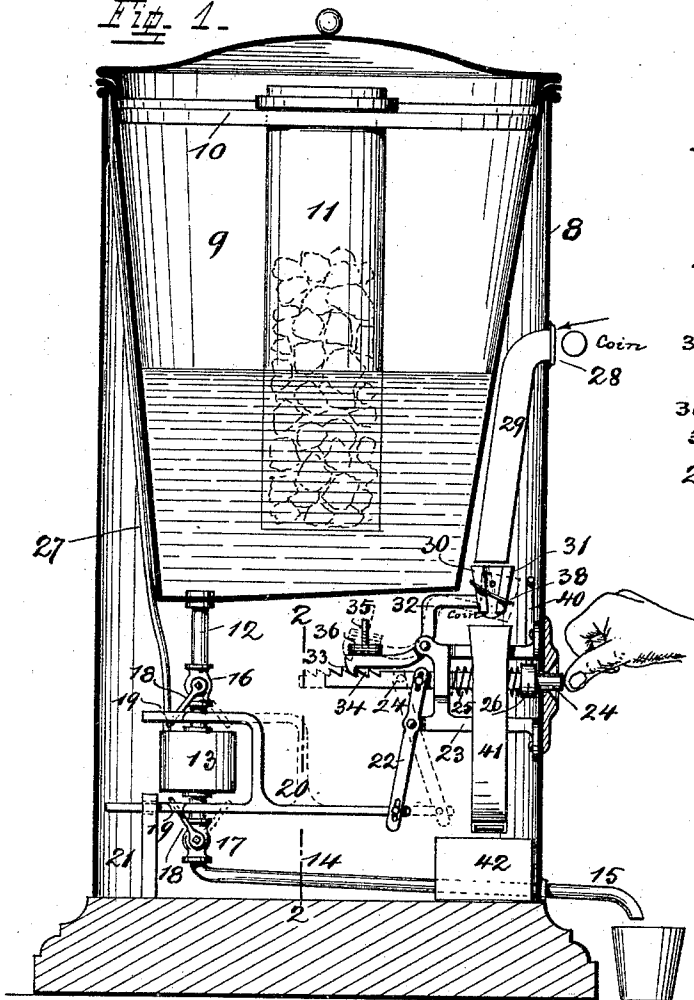


Fig. 3.

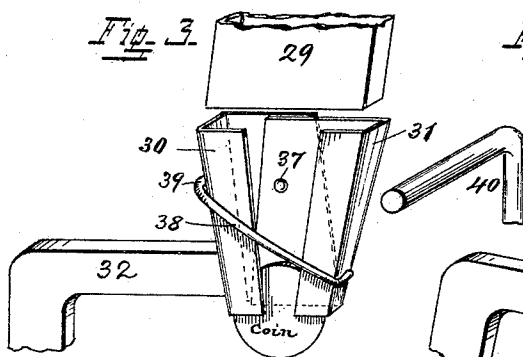


Fig. 4.

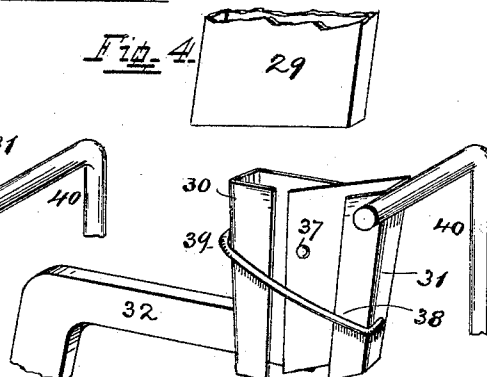
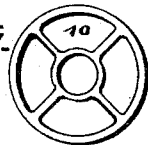


Fig. 5.



Attest

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UNITED STATES PATENT OFFICE.

CHARLES E. WESTLAKE, OF CINCINNATI, AND ALBERT WAGGONER, OF COLUMBUS, OHIO; SAID WAGGONER ASSIGNOR TO SAID WESTLAKE.

COIN-CONTROLLED LIQUID-VENDING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 497,107, dated May 9, 1893.

Application filed December 22, 1892. Serial No. 455,995. (No model.)

To all whom it may concern:

Be it known that we, CHARLES E. WESTLAKE, residing at Cincinnati, in the county of Hamilton, and ALBERT WAGGONER, residing at Columbus, in the county of Franklin, State of Ohio, citizens of the United States, have invented certain new and useful Improvements in Coin-Controlled Liquid-Vending Apparatus; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in liquid-vending apparatus where a mechanism actuated by the weight of a coin releases other mechanism which permits the liquid to be drawn.

The object is to prevent this latter mechanism from becoming locked again by the coin-actuated mechanism before the purchaser has had time to operate it for the purpose of obtaining the liquid. This is accomplished by a construction whereby the actuation of the locking-mechanism by the coin is continued and the same held open until the operation of the second mechanism has commenced. A necessary part of this construction is also the means whereby the coin is caused to cease its action upon the locking mechanism and releases it so as to be in proper position to lock the second mechanism when the time for such arrives.

Other features of our invention are the construction in general and the construction of the reservoir which contains the liquid and the means for cooling the latter.

In the following specification is found a full description of our invention, the same being also particularly pointed out in the claims at the end, its operation, parts and construction which latter is illustrated in the accompanying drawings, in which—

Figure 1, is a vertical section of such a liquid-vending apparatus provided with our improvements. Fig. 2, is a section taken at right angles to a section as taken in Fig. 1, and on line 2—2, of said figure. Figs. 3, and

4, are perspective views of parts of the coin-actuated locking-mechanism showing the same while receiving and discharging the coin. Fig. 5, is a top-view on a reduced scale, of the frame supporting the cooler within the storage-tank.

8, is an outer casing within which the storage-tank 9, for the liquid is suspended. Between the two, there is preferably an air-space provided which reduces the effects of the outside temperature upon the contents of the inner tank. Within this latter and near its top is provided a frame 10, which serves as a support for a cooling tank 11, which when filled with ice cools the liquid surrounding it and contained in tank 9. Communicating with this latter by a pipe 12 is a measuring-vessel 13, having an outlet-pipe 14, part 15, of which extends to the outside of casing 8. Passage through pipes 12, and 14, is controlled by valves 16, and 17, which have keys 18, connected to them which work in slots 19, of a reciprocating frame 20. This latter is supported on a standard 21, and connects to a lever 22, pivoted to frame 23.

24, is a push-rod guided by frame 23, and a hole in the casing 8, to the outside of which latter it extends. It is also connected to lever 22, so that when pushed inwardly it will cause frame 20 to move outwardly and by means of keys 18, operate valves 16, and 17. A spring 25, confined between frame 23, and a collar 26, secured to the push-rod will restore the parts again to their former position when the latter is released. When the valves are operated as first described, by push-rod 24, being moved inwardly, their operation will be such, that valve 16, closes, while valve 17, opens. This permits the contents of vessel 13, to escape through pipes 14, 15, to the outside, at the same time cutting off the supply from tank 9, so that only the contents of vessel 13, are permitted to escape by a single operation of the push-rod. If more is wanted, push-rod 24, must be released first whereby the valves are restored to their normal position, during which valve 17, cuts off passage to the outside, while valve 16, opens and permits the contents from tank 9, to supply vessel 13. 27, is a customary vent-pipe to permit the air to escape from vessel 13, while it is filling.

The operations of push-rod 24, are controlled

by the weight of a certain predetermined coin introduced through a slot 28, and chute 29. After leaving the latter the coin drops into a hopper, secured to a lever 32, pivoted to frame 23. The inner end of this lever is hook-shaped as shown at 33, and engages with notches 34, cut into push-rod 24. This end of the lever has also a pin 35, which receives and supports perforated weights 36, whereby the former is regulated and balanced. The size of the lower opening of the hopper below chute 29, is such that the proper coin intended to unlock push-rod 24, will almost but not quite pass through, while a smaller article, even if heavier, will drop clear through without affecting lever 32. When a coin of the proper denomination has entered the hopper, lever 32 will turn and disengage hook 33, from the notches 34, of the push-rod, putting this latter in a condition ready for operation. This condition of the parts remains until the purchaser obtains his drink, thereby giving ample time, especially to such persons who might be unfamiliar with the operation of the device. Lever 32, cannot swing back to its normal position to enable hook 33, to re-lock the push-bar, until it is lightened to permit such, by a discharge of the coin from the hopper and inasmuch as this discharge is effected by the inward movement of the push-rod, it follows that the latter must be operated first before a re-locking can take place. The construction whereby this discharge is accomplished is as follows: The hopper consists of two sections 30, and 31, of which the first section is rigidly secured to lever 32, while the other section is secured to the first section by a pivot 37, on which it is capable of swinging. 38, is a spring secured at 39, to the stationary section 30, and holding with its other free end the lower part of the swinging section close enough to the former section to prevent the coins from dropping clear through. See Fig. 3. Secured to push-rod 24, and extending upwardly therefrom is an arm 40, having at its upper end a lateral extension, so located as to strike the swinging section of the hopper above the pivot 37, while moving inwardly with the push-rod when the latter is operated. This causes

the lower end of the hopper to open and permits the coin to escape whereupon the now lightened lever drops back and assumes a ready position to re-lock the push-rod. After leaving the hopper an additional chute 41 may be used to convey the coin to a suitable receptacle 42.

Having explained our invention, we claim as new—

1. In a liquid vending apparatus of the kind described, the combination of a reservoir 9, a measuring vessel 13, communicating with it, an outlet-pipe from the latter vessel, valves controlling supply and discharge of it, a reciprocating, rigid frame 20, keys 18 connecting to the valves and working in slots of frame 20 for the purpose of operating the valves simultaneously, a supporting guide 21, for said frame a lever 22, to actuate frame 20, a push-rod to operate lever 22, and coin-controlled mechanism engaging with the push-rod, all as substantially shown and described.

2. In a liquid vending apparatus of the kind described, the combination of a reservoir 9, a measuring vessel 13, communicating therewith, an outlet pipe from this vessel, valves controlling its supply and discharge, a reciprocating, rigid frame 20, connected to said valves, by keys 18, a lever 22, to actuate this frame, a push-rod connected to lever 22, a lever 32, capable of locking this push-rod and having connected to one of its ends a coin-receiving hopper in two sections, one pivoted to the other and normally held sufficiently close together to prevent a coin from passing through and an extension 40 moving with the mechanism for operating the valves and so located as to be capable of coming in contact with one of the sections of the hopper for the purpose of opening its lower end to permit the coin to escape, all as substantially shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

CHARLES E. WESTLAKE.
ALBERT WAGGONER.

Witnesses:

C. SPENGEL,
ALFRED N. DAVIES.