(No Model.)

G. WILLIAMS.

BEER DRAWING APPARATUS.

No. 553,376. Patented Jan. 21, 1896

Fig. 1

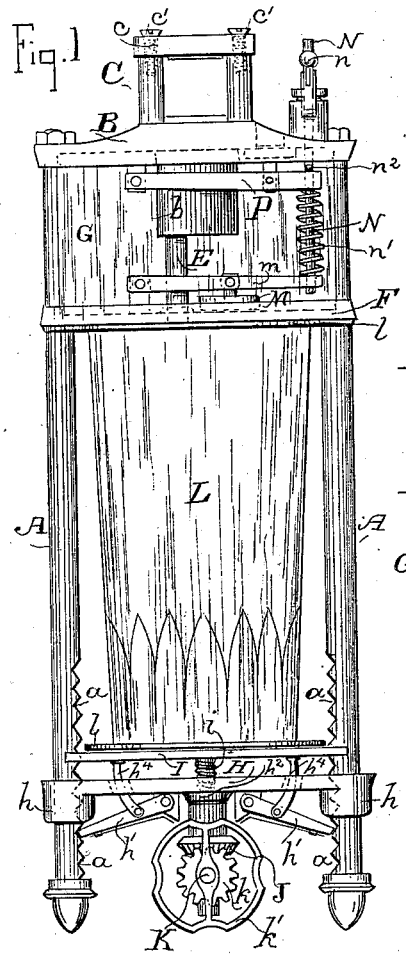


Fig. 3

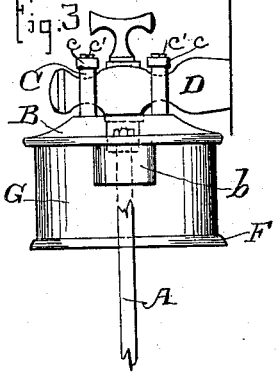


Fig. 2

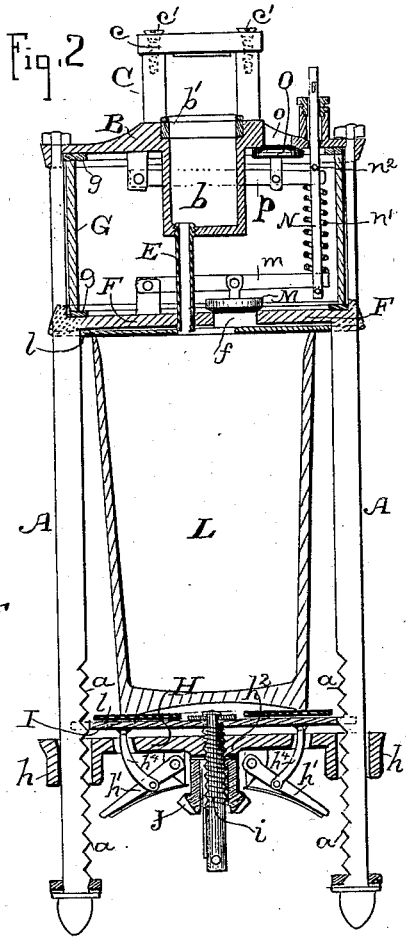


Fig. 4

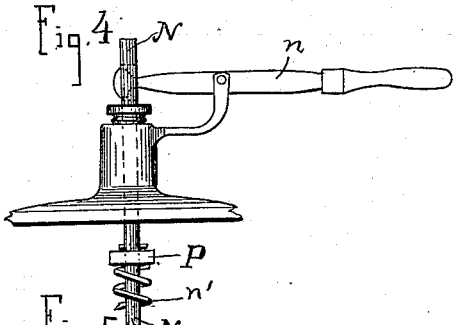
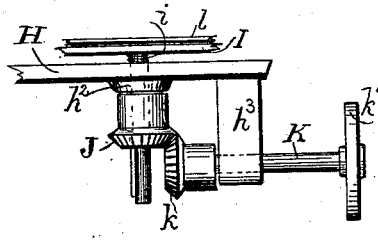


Fig. 5



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UNITED STATES PATENT OFFICE.

GEORGE WILLIAMS, OF SAN FRANCISCO, CALIFORNIA.

BEER-DRAWING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 553,376, dated January 21, 1896.

Application filed July 22, 1895. Serial No. 556,786. (No model.)

To all whom it may concern:

Be it known that I, GEORGE WILLIAMS, a citizen of England, residing in the city and county of San Francisco, State of California, have invented an Improvement in Beer-Drawing Apparatus; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to the class of devices for handling and dispensing effervescent beverages, particularly beer; and it consists in the novel apparatus hereinafter fully described by which beer or other effervescent liquid may be drawn directly from the keg or other receptacle into the tumbler without foaming and without the loss of too much gas, said beer being kept lively and sparkling.

Referring to the accompanying drawings, Figure 1 is an elevation of my apparatus. Fig. 2 is a vertical section of same. Fig. 3 is a view showing the attachment to faucet D. Fig. 4 is a detail of the valve-operating lever. Fig. 5 is a detail of the means for adjusting the rest I.

The frame of the apparatus is composed of two hangers A, the top plate B of which is provided with means C for clamping it to the faucet D of the beer-keg, said means being here shown as upright lugs having cross-yokes c secured to the lugs by set-screws c'. There is an enlarged socket b in the center of the top plate B provided with a suitable packing or gasket b', said socket being adapted to receive and to fit tightly the discharge of the faucet D. From the bottom of this socket a tube E leads directly down through a fixed plate F secured upon the hangers A.

Between the fixed plate F and the top plate B is formed a gas-chamber G by means of a circumscribing wall, preferably of glass, so that the interior can be seen, and said glass will by means of suitable gaskets g form a tight joint with the plates F and B.

Mounted upon the lower portions of the hangers A and adapted to be vertically adjusted thereon is the platform H for receiving the tumbler. This platform is rendered vertically adjustable by means of having end sockets h fitted freely upon the hangers and spring-controlled pawls h', the ends of which engage with rack-teeth a on the inner surfaces of the hangers A.

On top of the platform H is an adjustable rest I supported by a screw i, which passes down through a central nut h^2 in the platform H and receives on its lower end a pinion J which engages with a bevel-pinion k on the shaft K carried by a hanger h^3 depending from this platform H, said shaft having a handle k'. By operating this handle the screw i is operated and the rest I may be moved up or down with relation to the platform H, though its general vertical movement is received from and it accompanies the platform H.

From the pawls h' rise pins h^4 through the platform H, and are adapted to be pressed down by the rest I when said rest is brought down to its lowermost limit, which contact will cause the release of the pawls from the rack-teeth of the hangers, thereby permitting the whole platform and rest to be run down to the extremity of the hangers, whereby they are held by suitably-cushioned stops a', or said pawls may be released by hand.

Between the rest I and the fixed plate F above, the tumbler L is held, suitable rubber plates l being placed at the top and bottom of the glass to make a cushioned rest below and a tight joint above.

The tube E leads down through the fixed plate F and communicates directly with the tumbler L. In the fixed plate F and communicating with the tumbler is a port f, that is controlled by a valve M, said valve being carried by a pivoted lever m, which is itself connected with the vertically-movable rod N, to the upper end of which a lever n is attached, said lever being above the top plate of the frame and accessible from without. A spring n' encircling the rod N holds the lever m down and keeps the valve M normally closed.

In the top plate B is formed a port o, which is controlled from below by a valve O, which is carried by a pivoted lever P, the end of which is forked or slotted over the rod N and is pressed upon by a cross-pin n^2 in said rod.

The spring n' lies between the extremities of the two levers m and P and acts to hold the one down and the other up, so that by means of the same spring the two valves M and O are kept normally closed.

The operation of the apparatus is as follows: The platform H being relieved of its pawls is run down to its limit, and the tumbler being

placed upon the rest I the platform is run up until the top of the tumbler touches the rubber plate underneath the fixed plate F above. Then the handle k' is operated, and the screw i being turned the rest I is raised farther, so as to tightly clamp the tumbler between said rest and the plate F above and exclude the air. The beer is now turned on from the faucet and passing down through the tube E enters the tumbler directly, but without foaming, as the tumbler is air-tight. The lever n being pressed down opens the valve N and allows the excess of gas to pass up from the tumbler through the port f in the plate F and to enter the sealed chamber G above, and thus prevents the beer from foaming and running over when the tumbler is removed. Some foam, with very lively beer, will also enter said chamber. When this chamber needs to be relieved of its gas the lever n is raised up, which has the effect of opening the other valve O and permitting the gas to escape to the exterior air. The rest I is then lowered, and coming in contact with the pins h^4 of the pawls said pawls are released from the rack-teeth and the platform H is lowered so that the tumbler can be removed. The beer having been relieved of its excess of gas will not fly over when the tumbler is removed. It will not unduly foam, but will retain most of its gas and be lively and sparkling. It can be drawn quickly and consumed at once. The foam which has passed up into the sealed chamber G above can be let back again through the port f when the valve is opened, when the next tumbler is set in place and ready to receive more beer, and thus no beer will be lost.

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

1. An apparatus for drawing effervescent liquids, consisting of a frame having a fixed plate provided with a valved port, a vertically movable support below, means whereby the tumbler may be clamped and sealed between its support and the fixed plate, a hermetically sealed chamber standing in line with the tumbler and comprising said fixed plate, a top plate and a circumscribing wall, said chamber communicating with the tumbler through the valved port in the fixed plate, and a tube passing through the chamber and fixed plate whereby communication is established between the source of supply and the tumbler.

2. An apparatus for drawing effervescent liquids, consisting of a frame, a fixed plate carried thereby, a vertically movable platform below, and suitable gaskets or washers whereby the tumbler may be clamped and sealed between the vertically movable platform and the fixed plate, a tube by which the sealed tumbler communicates with the source of liquid, a hermetically sealed chamber in the frame, consisting of said fixed plate, a top plate and a circumscribing wall, a valved port by which said chamber communicates with the tumbler, and a valved port by which said chamber communicates with the exterior air.

3. An apparatus for drawing effervescent liquids, consisting of a frame, a movable platform for the tumbler, mounted and adapted to slide upon the sides of said frame, spring-controlled pawls carried by the platform and adapted to engage with rack teeth in the sides of the frame whereby the platform may be set at various heights, a fixed plate above and suitable washers whereby the tumbler is clamped air tight between the platform and the fixed plate, a tube in the upper portion of the frame by which the sealed tumbler communicates with the source of liquid, the hermetically sealed chamber in the upper portion of the frame, and a controllable port by which the tumbler and chamber communicate.

4. An apparatus for drawing effervescent liquids, consisting of a frame, a movable platform for the tumbler, mounted and adapted to slide upon the sides of said frame, spring-controlled pawls carried by the platform and adapted to engage with rack teeth in the sides of the frame, whereby the platform may be set at various heights, the separately adjustable rest upon said platform, a fixed plate above and suitable washers whereby the tumbler is clamped air-tight between the rest and the fixed plate, a tube in the upper portion of the frame by which the sealed tumbler communicates with the source of liquid, a hermetically sealed chamber in the upper portion of the frame, and a controllable port by which the tumbler and chamber communicate.

5. An apparatus for drawing effervescent liquids, consisting of a frame, a movable platform for the tumbler, mounted and adapted to slide upon the sides of said frame, spring-controlled pawls carried by the platform and adapted to engage with rack teeth in the sides of the frame, whereby the platform may be set at various heights, said pawls having the releasing pins, the separately adjustable rest upon said platform and adapted to actuate the pawl releasing pins, a fixed plate above and suitable washers whereby the tumbler is clamped air-tight between the rest and the fixed plate, a tube in the upper portion of the frame by which the sealed tumbler communicates with the source of liquid, the hermetically sealed chamber in the upper portion of the frame, and a controllable port by which the tumbler and chamber communicate.

6. In an apparatus for drawing effervescent liquids, the combination of the vertically adjustable platform for receiving the tumbler, said platform having the pawls engaging with racks on the frame on which it moves, the separately adjustable rest on said platform having the screw stem threaded in a nut in the platform, the handled shaft and bevel gears by which said rest is adjusted, and connections between the rest and pawls whereby the latter are actuated by the former.

7. In an apparatus for drawing effervescent

liquids, the combination of the vertically adjustable platform for receiving the tumbler, said platform having the pawls engaging with racks on the frame on which it moves, the separately adjustable rest on said platform having the screw stem threaded in a nut in the platform, the handled shaft and bevel-gears by which said rest is adjusted, and the pins of the pawls operated by the rest, and by which they are released from the rack teeth.

8. In an apparatus for drawing effervescent liquids, the hermetically sealed chamber for the reception of the gas, having a valved port in its lower chamber communicating with the tumbler which receives the liquid, and in its upper portion a gas vent port, in combination with the pivoted levers carrying the valves separately controlling said ports, the single lever *n*, the rod N operated by the lever, and the spring *n'* on the rod for controlling both valve levers.

9. An apparatus for drawing effervescent liquors, consisting of a frame composed of side hangers having a top plate, with devices for clamping the frame to the liquid faucet, said top plate having a socket with means for effecting a tight joint with the discharge of the faucet, and a tube leading down from said socket, a fixed plate and a hermetically sealed chamber formed between the fixed plate and the top plate, said chamber being provided with a valved port in its bottom, and a valved port in its top, an exterior lever and connections for separately controlling said valved ports, an adjustable platform on the lower portion of the hangers, provided with means for holding it at various elevations, a separately adjustable rest for the tumbler, and means for clamping the tumbler between the rest and the fixed plate above, and forming a tight joint.

In witness whereof I have hereunto set my hand.

GEORGE WILLIAMS.

Witnesses:
S. H. NOURSE,
WM. F. BOOTH.