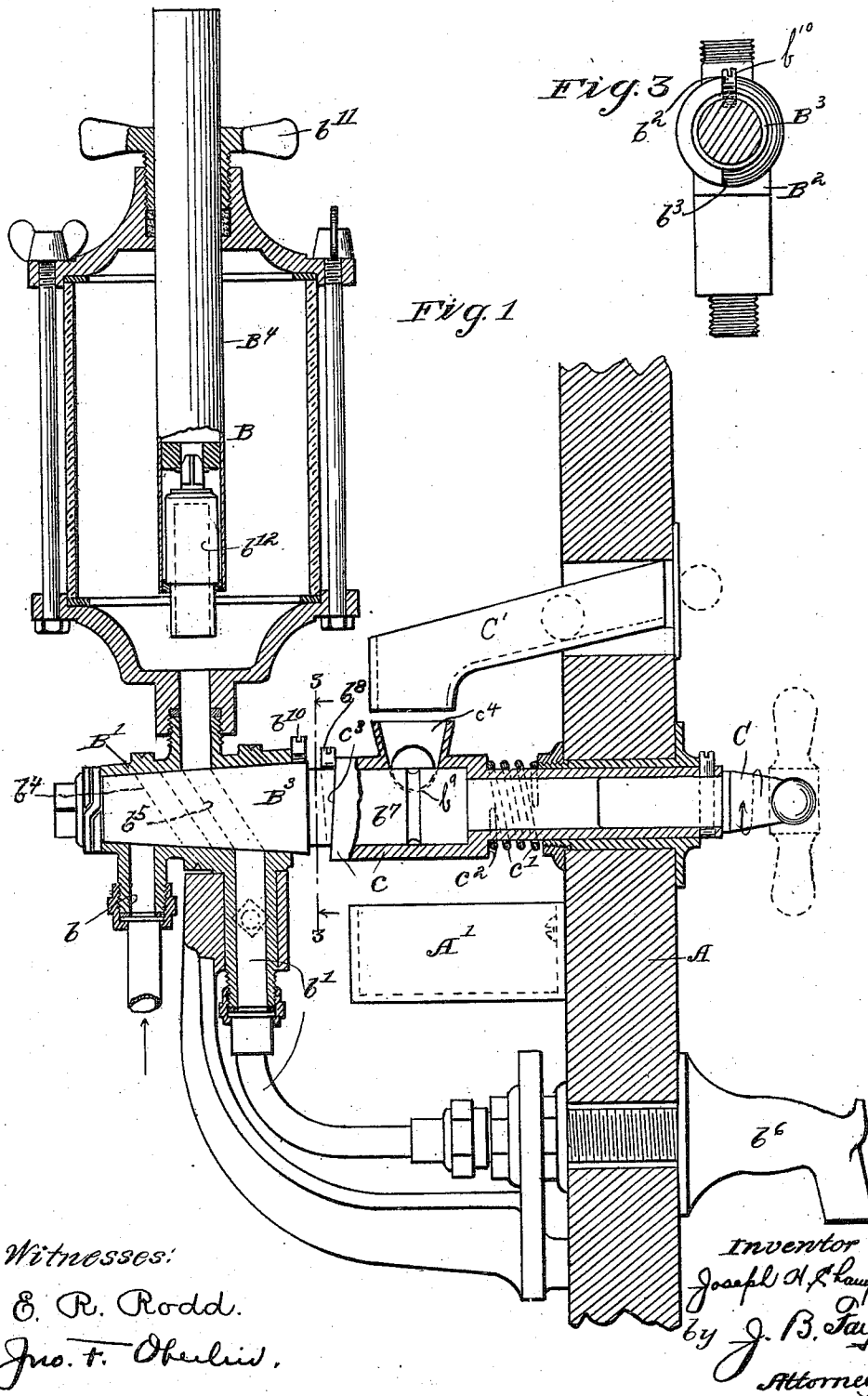


J. H. CHAMP.
LIQUID DISPENSING DEVICE.
APPLICATION FILED APR. 22, 1908.

986,361.

Patented Mar. 7, 1911.

2 SHEETS—SHEET 1.



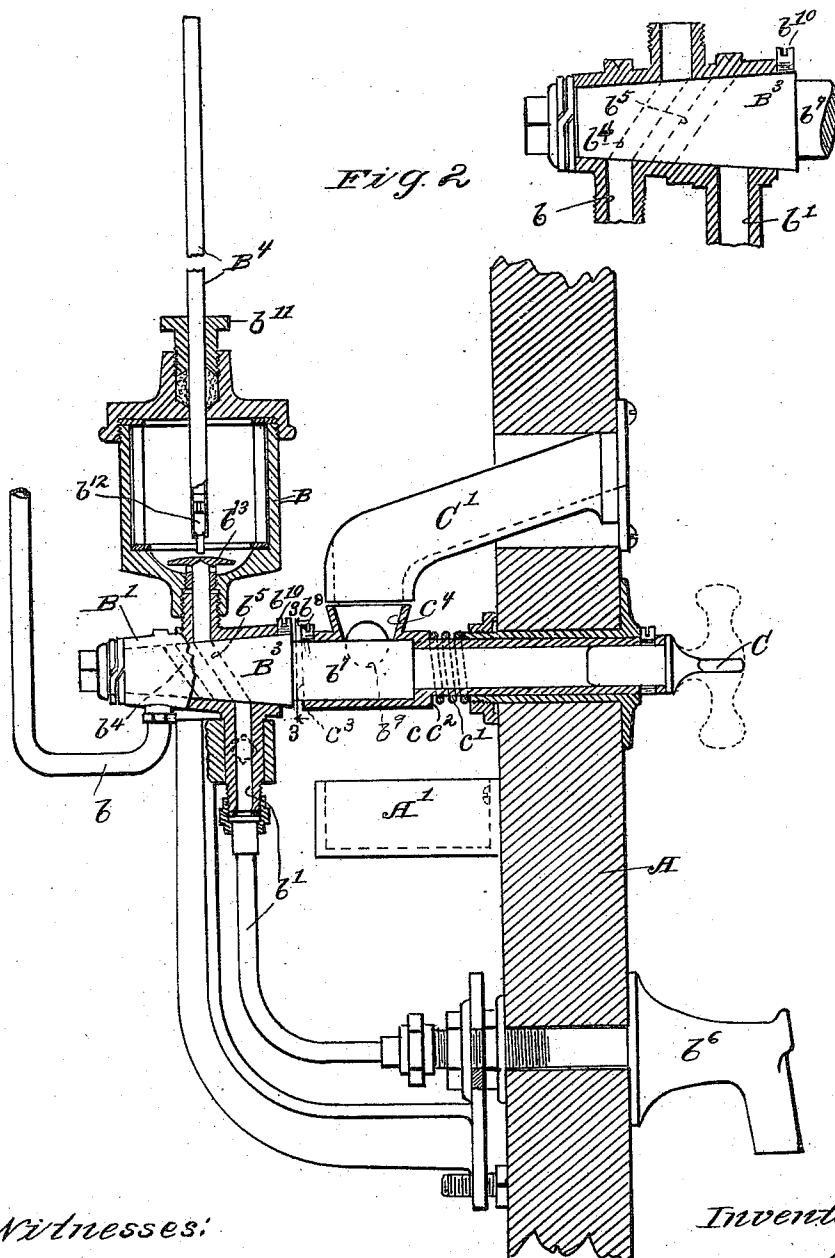
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2 SHEETS—SHEET 2.

Fig. 4



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UNITED STATES PATENT OFFICE.

JOSEPH H. CHAMP, OF CLEVELAND, OHIO.

LIQUID-DISPENSING DEVICE.

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Specification of Letters Patent.

Patented Mar. 7, 1911.

Application filed April 22, 1908. Serial No. 428,598.

To all whom it may concern:

Be it known that I, JOSEPH H. CHAMP, citizen of the United States, resident of Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and useful Improvement in Liquid-Dispensing Devices, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

The present invention relating, as indicated, to liquid dispensing apparatus has more particular regard to apparatus of this type wherein the operation is controlled by the deposit of a coin or other token.

The present apparatus being designed primarily for use in clubs and like situations, one of the objects has been to render the apparatus as simple in construction and operation as possible. Accordingly elaborate precautionary devices have been omitted, still retaining, however, safe-guards for the purpose of preventing unauthorized operation of the device. It is of course contemplated that other fields of use than the one specifically referred to will be found, and it is not meant to imply any limitation of the device to such single field.

To the accomplishment of the above and related objects, said invention, then, consists of the means hereinafter fully described and particularly pointed out in the claims.

The annexed drawings and the following description set forth in detail certain mechanism embodying the invention, such disclosed means constituting, however, but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawings: Figure 1 is a vertical sectional view of a slot machine for dispensing beer or other analogous liquids; Fig. 2 is a similar sectional view of a machine for dispensing whisky, or other non-effervescing liquids; Fig. 3 is a sectional view of a detail common to both machines, the plane of the section being designated by the line 3—3 Figs. 1 and 2; Fig. 4 is a transverse section of the controlling plug valve shown in Fig. 1, but illustrating the same in a different operative position.

As indicated in the foregoing general description of the drawings, two slightly modified forms of the invention are represented thereby. Attention will first be directed accordingly to the form of device designed for

the dispensing of effervescing liquids, or liquids kept under pressure; the changes in such device, where the other class of liquids are handled, will then be pointed out.

Referring to Fig. 1, A designates the frame from which the dispensing apparatus proper is supported. This will ordinarily be the wall or casing of a refrigerator or like inclosure. The source of supply, whether a barrel, keg, or other receptacle, is not shown, but will of course, in the case of beer or other similar liquids, be maintained under a proper pressure, whereby such beer will be forced into the dispensing apparatus as required. The dispensing apparatus proper, then, comprises a measuring receptacle B suitably supported by means of a bracket attached to the inner face of wall A. In a casing B' connected with the lower portion of receptacle B are provided an inlet, or supply passage, *b*, and an outlet, or discharge passage *b'*, respectively adapted to communicate with said receptacle, such communication being controlled by means of a rotatable valve plug B², of the usual form, fitted to said casing. Suitable stops *b*² *b*³ on the casing B', Fig. 3, disposed to engage a set screw *b*⁴ on the plug B² limit the rotation of said plug to positions wherein the ports *b*⁴ *b*⁵, with which such plug is provided, connect receptacle B with the supply and discharge passages *b* *b'*, respectively. It will accordingly be seen that in one position of the valve plug liquid, forced from the source of supply by the pressure maintained there, will enter the receptacle B, and that in another position of such valve plug this supply will be cut off, and the discharge passage opened instead, so that the liquid previously received in the receptacle may thereupon flow out through such discharge passage and escape from a faucet *b*⁶ projecting from in front of the supporting wall A. To alternately rotate the valve plug into its respective operative positions, a handle C likewise projecting without the wall A is provided, such handle being provided with a sleeve *c* that engages the stem *b*⁷ of the valve and is both longitudinally and rotatably movable with respect to the same. A spring *c'*, interposed between the inner surface of the wall A and a shoulder *c*² on such sleeve, normally maintains the latter at its innermost position. The inner end of the sleeve is formed with a cam-face *c*³, the offset of which is adapted

to engage a set-screw b^8 mounted upon valve stem b^7 and forming a stop. The disposition of the cam and offset on the end of the sleeve is such that rotation of the handle C in proper direction will be effective to turn the plug into the position where connection is had between the receptacle B and the discharge passage b' . This will accordingly be seen to be the normal position of the parts of the device, and is the position in which they appear in Figs. 1 and 2. The sleeve c borne by the handle C is provided with a longitudinally arranged slot c^4 and the stem of the valve with a similar slot b^9 adapted to register therewith, such slots being formed to receive a coin of some particular denomination, as for instance a nickel or a dime. A suitable chute or guide C' leading from a slot opening in the wall A is provided to conduct the coins into proper position where they may drop into the slots in such handle and valve stem, when these parts are in normal position as aforesaid. When in place, the coin will obviously render the handle effective to rotate the plug in the opposite direction to a position wherein connection is had between receptacle B and supply passage b , as well as into position where connection is had between such receptacle B and the discharge passage. In order to obtain a quantity of liquid from the apparatus, it will accordingly be necessary to drop a coin in the slot whereby the handle is thus fixed to the valve; thereupon rotate the handle in the direction indicated by the arrow in Fig. 1 until further rotation is prevented by engagement of set screw b^{10} with stop b^8 ; then, after the desired quantity of liquid has been admitted to the receptacle B, rotation of the handle is reversed and the plug restored to its normal position wherein connection is had with the discharge passage and the liquid previously received in the receptacle thus dispensed. Incidentally to rotation of the handle in the opposite direction as described, the coin, which will be located in the registering slots of the handle sleeve and the valve stem, will have an opportunity to drop out, a suitable box or till A' being provided for its reception. In order to gage the amount of liquid that will be received in the dispensing receptacle B at any one operation of the device, such receptacle is made a closed receptacle, and is provided with a vent-tube B^4 that may be secured with its lower end depending to any desired level in the receptacle by means of a suitable clamping collar b^{11} . Such lower end of tube B^4 is provided with a float valve b^{12} that will close the vent upon the liquid rising in the receptacle to a predetermined height, which height can obviously be varied by adjustment of the height of the tube. This valve, it is evident, will effectually close the vent and prevent the

escape of the pressure fluid, for example, carbonic-acid gas wherewith the liquid may be charged.

Where a still liquor, as, for example, whisky, is to be dispensed, a gravity feed will ordinarily be preferable to the employment of pressure means for elevating the liquor to the dispensing receptacle; such receptacle moreover, Fig. 2, will not be as large as in the case of a beer dispensing machine. In connection with this device a deflecting plate b^{13} is illustrated as being located over the opening in the bottom of the dispensing receptacle through which the liquor is admitted thereto and withdrawn therefrom. So far as the coin-controlled apparatus is concerned this is the same in both forms of device, and the description previously given need hence not be repeated.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, provided the means stated by any one of the following claims or the equivalent of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention:—

1. In a liquid dispensing device, the combination of a rotatable member operative in different angular positions about its axis, stops limiting rotation of said member in opposite directions to such operative positions, respectively, a handle alined with said member and both longitudinally and rotatably movable with respect to the same, clutch means operable upon longitudinal movement of said handle to fix the same to said member for rotation in one direction, and means adapted to render said handle effective to rotate said member in the opposite direction.

2. In a liquid dispensing device, the combination of a rotatable member operative in different angular positions about its axis, stops limiting rotation of said member to such operative positions, respectively, a handle alined with said member and both longitudinally and rotatably movable with respect to the same, said handle being provided with a sleeve portion loosely engaging said member and formed at the end with a cam-face, a stop on said member adapted, upon longitudinal movement of said handle inwardly, to be engaged by the offset of such cam-face and thereby fix said handle to said member for rotation in one direction, resilient means urging said handle inwardly, and means adapted to render said handle effective to rotate said member in the opposite direction.

3. In a liquid dispensing device, the combination of a receptacle, liquid supply and discharge passages therefor, a valve plug provided with ports adapted in different

positions of said plug to connect said receptacle with said passages respectively, stops limiting rotation of said plug in opposite directions to such connecting positions respectively, a handle alined with the stem of said plug and both longitudinally and rotatably movable with respect to the same, clutch means operable upon longitudinal movement of said handle to fix same to such stem for rotation in proper direction to connect said receptacle with said discharge passage, and means adapted to render said handle effective to rotate said plug in the opposite direction to connect said receptacle with said supply passage.

4. In a liquid dispensing device of the character described, the combination of a receptacle, liquid supply and discharge passages therefor, a valve plug provided with ports adapted in different positions of said plug to connect said receptacle with said

passages respectively, stops limiting rotation of said plug in opposite directions to such connecting positions respectively, a handle alined with the stem of said plug and provided with a sleeve portion engaging the same and both longitudinally and rotatably movable with respect thereto, the end of said sleeve being formed with a cam-face, a stop on said stem adapted to be engaged by the offset of such cam-face upon rotation of said handle in proper direction to connect said receptacle with said discharge passage, and means adapted to render said handle effective to rotate said plug in the opposite direction to connect said receptacle with said supply passage.

Signed by me this 20th day of April, 1908.
JOSEPH H. CHAMP.

Attested by—

E. R. RODD,
JNO. F. OBERLIN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
