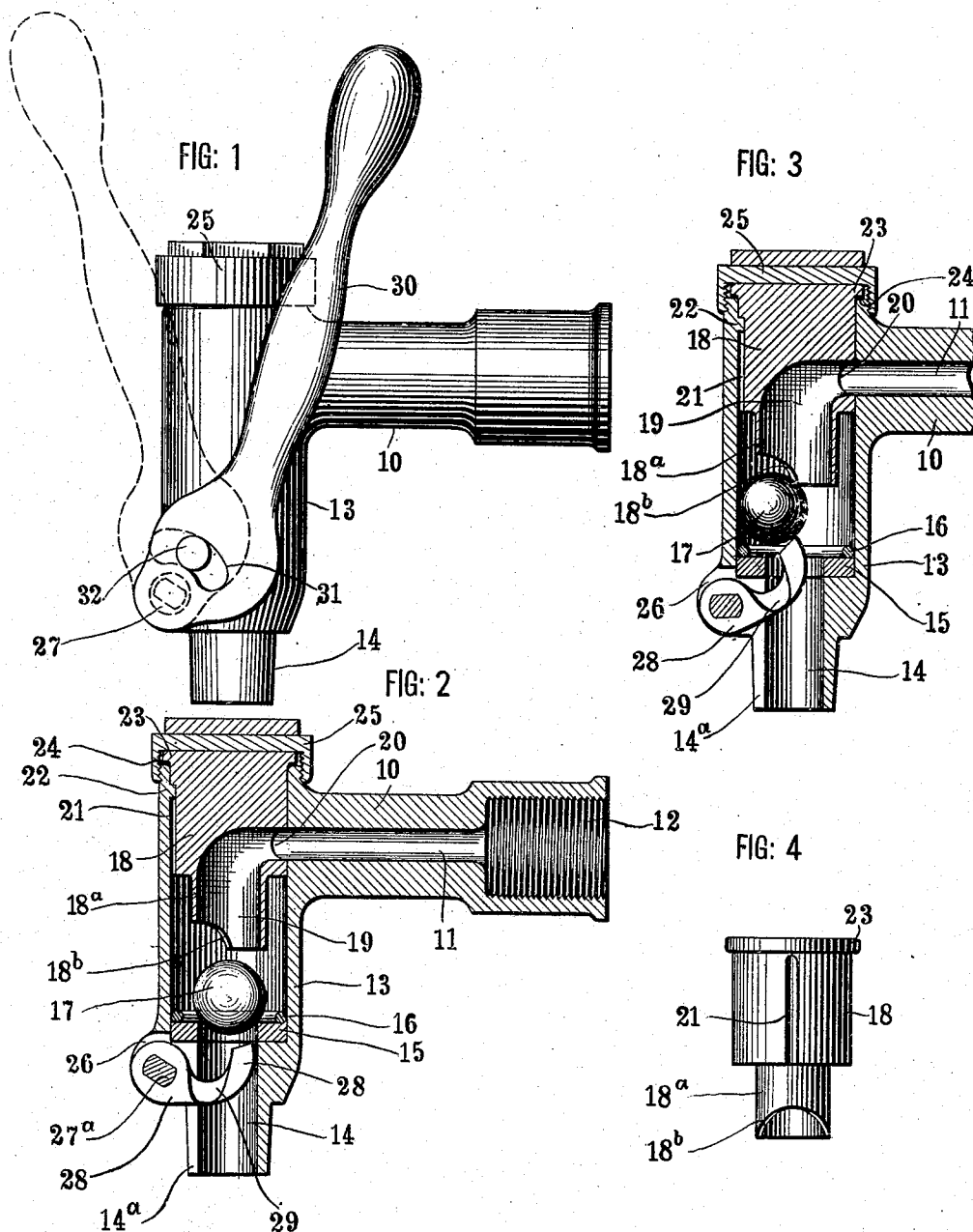


E. M. & M. DEILLER.
 FAUCET.
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937,513.

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UNITED STATES PATENT OFFICE.

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FAUCET.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, EUGENE M. DEILLER and MARTIN DEILLER, of the city of Newark, county of Essex, and State of New Jersey, have invented a new and useful Improvement in Faucets, of which the following is a full, clear, and exact description.

Our invention relates to improvements in faucets, and especially to faucets such as are used for drawing beer, ale, and malt liquid.

The object of our invention is to produce a faucet of simple construction having its parts arranged so that they can be easily assembled or taken apart, and more particularly to produce a faucet in which the bore of the body portion of the faucet discharges into a larger chamber, from which the discharge is controlled by a valve. In this way the liquor is given an opportunity to expand before issuing from the vent of the faucet, and thus it can be discharged practically without foam if desired, or, as will hereafter appear, the withdrawal vent can be regulated so that any desired degree of foaminess can be given to the liquid.

Our invention is further intended to produce a reliable valve which will not leak, which can be easily operated, and which is well adapted for the purpose of drawing liquid generally.

Still another object is to construct and arrange the handle device so that the valve can be easily regulated and so that a drag can be placed on the valve mechanism to prevent the latter from closing too easily.

With these ends in view and with the general object of producing a simple, inexpensive and efficient faucet, our invention consists of certain features of construction and combinations of parts which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar reference characters indicate corresponding parts in all the views.

Figure 1 is a side elevation of the faucet embodying our invention. Fig. 2 is a detail section showing the valve closed. Fig. 3 is a broken section similar to Fig. 2, but with the valve open, and Fig. 4 is a detail view of the plug which forms an important part of the invention.

The faucet has a barrel 10 with a longitudinal bore 11 therethrough, and with the

usual means, to wit:—the threaded part 12 to couple to a threaded stem of a beer barrel or equivalent structure. The bore 11 discharges through a plug, which will be presently described, into the vertical part 13 of the faucet, and this part is preferably integral with the part 10, both forming one casting of a general elbow shape. The part 13 is hollow and has an enlarged chamber therein, that is to say the chamber is much greater in cross sectional area than the bore 11, so that the liquid discharged into the chamber can have an opportunity to expand before being withdrawn from the faucet through the reduced delivery part or nozzle 14. The flow of liquor through the discharge nozzle 14 is regulated by a valve 17, and in order that this may make a tight closure, it rests on a gasket 16 which fits upon an annular shoulder forming the bottom of the chamber in the part 13. The gasket 15 has a tendency sometimes to stick to the valve 17, so as to prevent the latter from operating efficiently, and to avoid this difficulty we use a holding means such as the spring ring 16, which fits snugly in the chamber of the part 13 and rests against the gasket 15, thereby preventing the displacement of the latter. The part or member 13 is open its full size at the top, and this top part is closed by a plug 18 which has a bore 19 therethrough, this bore being preferably larger than the bore 11, and it opens from the side of the plug as shown at 20 so as to register with the bore 11. The discharge of the bore 19 is vertically downward practically in alinement with the bore of the nozzle 14. The plug 18 is preferably secured in place by a screw cap, as presently described, and we get a very nice adjustment in this way, and this is particularly so as we provide a longitudinal groove 21 in one side of the plug which receives a boss 22 on the wall of the member 13, and thus the plug is prevented from turning, and the bosses 19 and 11 are sure to register.

The plug 18 has preferably a reduced lower end 18^a, which leaves room in the chamber of the part 13 for the liquid to expand around this part of the plug, and the reduced part 18^a is preferably cut away on one side as shown at 18^b, so that when the valve 18 is raised, instead of closing the bore 19 it will, if raised against the part 18^a still leave a vent through the part 18^b through

which the liquid can flow. It will be seen that when the ball valve 17 is on its seat, the pressure from within the barrel will cause the valve to remain closed, and it can be raised against the part 18^a so as to leave a relatively small outlet from the bore 19, or it can be placed midway between the bore 19 and its seat, so that the liquid will flow through rapidly. By raising it against the part 18^a, the relatively small quantity of liquid flowing through the part 18^b, which serves as a port, will have ample opportunity to expand within the member 13, and will consequently flow out through the nozzle 14 quite clear of foam, while by permitting a greater flow from the bore 19, the liquid will be more foamy as it is discharged.

The plug 18 has a shoulder 23 at the top which fits on the top edge of the part 13 and a lead washer or equivalent washer 24 is placed at the junction of the two parts so as to insure a perfectly tight fit. The plug 18 is locked in place by the screw cap 25 which fits the upper part of the member 13. To actuate the valve 17 any suitable means can be used, but I prefer to use the structure shown and described, and to provide for this the lower end of the member 13 has a boss or enlargement 26, in which is journaled the shaft 27, and this has its center section or portion preferably flattened as shown at 27^a so that the valve stem or finger 28 can be secured thereto and held so as not to turn. The stem or finger 28 is curved so that its inner end will strike the valve 17, and it swings in the split part 14^a of the nozzle 14, and has its middle portion thinned on the upper edge as shown at 29 so as not to offer any great obstruction to the flow of liquid.

The valve stem is actuated by the lever or handle 30, which is secured to the shaft 27, and which has a transverse slot 31 which receives the stop 32, this being fast on the member 13. Thus the movement of the handle 30 is limited, and one wall of the slot 31 is made preferably slightly eccentric so as to fit rather snugly against the stop 32 and so the slot and stop act to limit the movement of the lever and consequently of the valve, and at the same time the friction of the stop against the slot wall serves as a drag to prevent the handle from moving too easily.

From the foregoing description it will be seen that the special thing is to have the bore 11 discharge through a removable plug into a chamber which has a reduced discharge nozzle controlled by a valve; that it is also very desirable to have the plug provided with a reduced lower end, but that the faucet can be made of any appropriate design, and that many of the details of construction can be varied without affecting the principle of the invention.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent:—

1. A faucet having a body of general elbow shape with a longitudinal bore through the horizontal member and a relatively large chamber in the vertical member, a reduced valve controlled discharge nozzle leading from the said chamber, and a plug closing the upper part of said chamber, the said plug having a bore registering with the first mentioned bore and discharging into the aforesaid chamber, the wall of the said plug being cut away at its lower end.

2. A faucet of a general elbow shape, having a bore through the horizontal member and a chamber having a reduced shoulder at its lower end and opening upward through the vertical member, a plug entering the said chamber and having a reduced lower end with a bore therethrough opening through the side of the plug and registering with the bore of the horizontal member, and a centering device to hold the bore of the plug in registry with the bore of the horizontal member, the wall of the said plug being cut away at its lower end.

3. In a faucet having a bored horizontal member and a chambered vertical member with a reduced discharge, the combination with the aforesaid parts, of a plug closing the top of the chamber and having a bore registering with the bore of the horizontal member and discharging into the chamber, a ball valve seated in the reduced discharge end of the chamber, a rock-shaft journaled on the faucet, and a finger swinging on the rock shaft and engaging the ball within its free end, the intermediate portion of the upper edge of the finger being thinner than the adjacent portions thereof.

4. The combination with a faucet having a discharge nozzle and a valve seated at the inlet of the nozzle, of a shaft journaled on the faucet, a finger carried by the shaft and swinging in the nozzle so as to engage the valve, a lever on the shaft, said lever having a transverse slot therein, and a stop lug on the faucet entering the slot and frictionally engaging the wall thereof, thereby serving as a brake or drag to restrict the movement of the ball valve.

5. A faucet of general elbow shape having a bore through the horizontal member and a chamber in the vertical member, a discharge nozzle in the bottom of the chamber, a valve seated in the mouth of the said nozzle, a plug closing the top of the chamber and having a bore registering with the bore of the horizontal member and discharging above the valve, one wall of the said plug being cut away, and means for raising the valve against the lower end of the plug to partially close the bore thereof.

6. A faucet of general elbow shape having
a bore in the horizontal member and a cham-
ber in the vertical member with a discharge
nozzle in the bottom thereof, a ball valve
5 seated in the mouth of the said nozzle, means
for raising the valve, a plug closing the top
of the chamber, said plug having a reduced
lower end and a bore leading through said
reduced part and registering through the
side of the plug with the bore of the hori- 10
zontal member, and a cap to secure the plug
in the chamber.

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