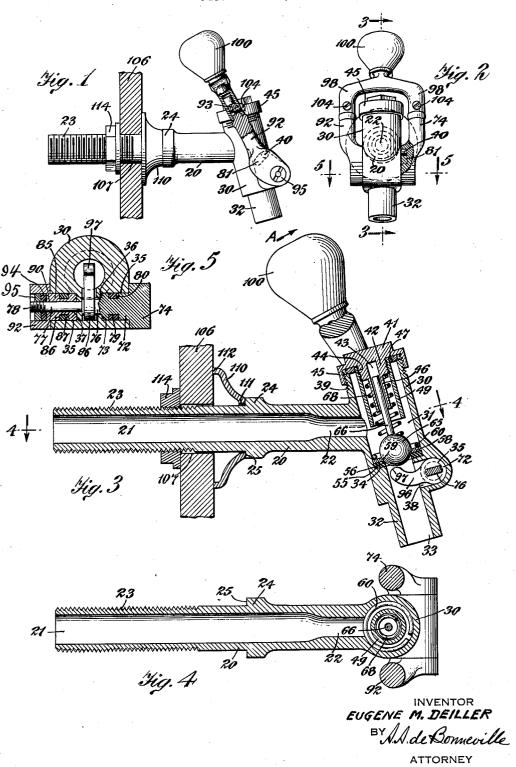
FAUCET

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## UNITED STATES PATENT OFFICE

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## FAUCET

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1 Claim. (Cl. 251-134)

This invention relates to a faucet.

The object of the invention is the production of a faucet for drawing beer and various carbonated beverages under pressure, and adapted to effervesce the beer or beverages as required.

The second object of the invention is the production of a faucet with a barrel and a valve casing inclined thereto for the easy flow of the fluid operated with, and adapted to discharge said fluid in a stream inclined to a vertical plane to easily enter a glass or container held in an inclined position.

The third object of the invention is the production of a faucet the parts of which can be easily dismembered for repairs and cleaning, and which can be easily installed in place.

In the accompanying drawing Fig. 1 represents a side view with parts in section, of an exemplification of the improved faucet; Fig. 2 shows a right hand view of Fig. 1 partly in section; Fig. 3 indicates an enlarged section of Fig. 2 on the line 3, 3; Fig. 4 is a section of Fig. 3 on the line 4, 4 and Fig. 5 shows an enlarged section of Fig. 2

on the line 5, 5. The faucet in this instance comprises the barrel 20, having the cylindrical inlet port 21 with the cylindrical outlet portion 22 of smaller diameter. The barrel 20 is shown having the exterior thread 23 and the projecting collar 24 forming the shoulder 25. An inclined valve casing 30 is integral with and extends from the outlet end of the barrel 20. The valve casing 30 is shown with its cylindrical chamber 31, and has formed therewith the outlet nozzle 32 having the cylindrical outlet port 33, which latter is smaller in diameter than the diameter of the chamber 31. A shoulder 34 is formed between the chamber 31 and the port 33. At the upper end of the outlet nozzle 32 is indicated a cylindrical operating chamber 35, having the shoulders 36 and 37 and the slot 38 in its central portion. The casing 30 is indicated with the exterior thread 39 at its upper end. A guide pin 40 extends from one side of the shell of the chamber 30. A cap 41 is shown with the sleeve 42 having the axial cylindrical guide opening 43 and the exterior thread 44. The cap 41 also has integral therewith the outer sleeve 45 having an interior thread. An inner guide barrel 46 extends from the sleeve 42. The sleeve 45 is in threaded engagement with the thread 39. A washer 47 of flexible packing is interposed between the cap 41 and the top edge of the shell of the valve casing 30. An outer guide barrel 49 has an interior

thread at its upper end, which is in threaded en-

gagement with the thread 44 of the sleeve 42. Upon the shoulder 34 is seated the flexible annular valve seat 55, preferably of rubber, having the spherical shaped seat per se 56 at the upper end of its opening. A metallic annular shaped valve seat 58 is positioned upon the valve seat 55 and has formed therewith the spherical shaped seat per se 59. An expanding split ring 60 is positioned in the chamber 31 and bears against the upper face of the valve seat 58 and the inner face 10 of the shell of the valve casing 30.

A ball or spherical shaped valve 65 has extending therefrom the valve stem 66, which is slidably positioned in the opening of the guide barrel 46. A helical spring 68 surrounds the guide barrel 46 15 with one end bearing against the bottom face of the sleeve 42 and its other end bears on the spherical shaped valve 65. In the operating chamber 35, see Figs. 3 and 5, is rotatively positioned the cylindrical shank 72, having the shoul- 20 der 72 which bears against the shoulder 36. The shank 72 has extending therefrom the handle member 74. The shank 72 has integral therewith the flattened portion 76 and from the latter extends the pin 77 having the threaded end 78. 25 An annular groove 79 is formed in the shank 72 for the packing ring 80. A curved guide opening 81 concentric with the shank 72 is indicated in the handle member 74 for the guide pin 40. A second cylindrical shank 85 coaxial with the shank 30 72 is also supported in the operating chamber 35 and has formed therewith the annular groove 86 for the packing ring 87. The shank 85 at its inner end bears against the shoulder 37. shank 85 has formed therein the opening 90 and 35 has supported thereon the lower end of the handle member 92 having the shank 93 integral therewith. The handle member 74 also has a shank 93 not shown. A flexible washer 94 encircles the pin 77 and a nut 95 engages the threaded end 78. 40

An actuating lever 96 having the rounded end 97 is secured to the flattened portion 76 of the shank 72. The rounded end 97 constitutes a cam surface.

A U shaped handle is indicated with the par- 45 allel members 98 tubular at their lower ends and has integral therewith the operating knob 100. The tubular ends of the members 98 engage the shanks 93 of the handle members 74 and 92. Screws 104 tightly secure the members 98 to the 50 shanks 93.

The vertical apron 106 of a bar or table is indicated with the opening 107. The threaded end 23 of the barrel 20 is positioned in the opening 107. A pyramidal washer 110 having the top 55

end 111 and the bottom end 112 encircles the barrel 20. The end 111 of the said washer bears against the shoulder 25 and its bottom end 112 bears against the apron 106. A lock nut 114 is in threaded engagement with the thread 23 and thereby the faucet is locked in operative position.

It will be noted that the coaction of the metallic valve seat 58 and the rubber valve seat 55 10 constitutes a double valve seat, which is durable and flexible and on both seats of which the valve 65 is simultanenously seated. The metallic valve seat 58 secures durability and the rubber valve seat 55 secures flexibility.

15 Attention is also called to the fact that the inclination of the longitudinal axis of the valve casing 30 with respect to the longitudinal axis of the barrel 20 enhances the easy flow of the beer or other beverage from said barrel to said 20 casing, and positions the nozzle for the easy discharge of the fluid flowing therethrough, to enter a glass or other receptacle held in an inclined position under said nozzle.

The barrel 20 of the faucet is connected to 25 the appurtenances for supply of beer or other beverage preferably under pressure.

To use the faucet a glass or other container is held under the outlet nozzle 32 and the operating knob 100 is swung in the direction of 30 the arrow A, Fig. 1, which causes the actuating lever 96 to swing up, and the cam surface of its rounded end 97 bears up against the surface of the spherical shaped valve 65 to lift the latter.

The knob 100 is swung in the direction of the arrow A to slightly lift the valve 65, whereby a small effervescent quantity of the beer or other beverage is charged into the glass to be filled. The coaction of the guide pin 40 and the curved guide opening 81 controls the length of the swing 40 of the operating knob 100 and consequently the lift of the valve 65. After the glass or other container has been charged the required amount with the effervescent fluid, the operating knob

100 is swung in a direction opposite to the arrow A, whereby the valve 65 is forced to its seats 59 and 56 by the tension of the spring 68. The operator then quickly swings the operating knob 100 in the direction of the arrow A, to lift the valve 65 to fill the glass with the beer or other beverage.

Various modifications may be made in the invention and the present exemplification is to be taken as illustrative and not limitative thereof.

Having described my invention, I claim: In a faucet the combination of a barrel, a valve casing forming a chamber at the outer end of said barrel, the longitudinal axis of said casing inclined to the longitudinal axis of the barrel a guide pin extending from the valve casing, an 15 annular valve seat in the lower end of said casing, a valve adapted to bear on said valve seat, an outlet nozzle extending from said valve casing, said valve casing having a cylindrical operating chamber formed therein, said operating chamber 20 having a slot leading therefrom, a cylindrical shank positioned in said cylindrical operating chamber, a flattened portion extending from one end of said shank, a pin having a threaded end extending from said flattened portion, a washer 25 supported on said pin and a nut engaging said threaded end, an adjusting lever having a rounded end with a cam surface suppported on said flattened portion of said shank extending through said slot and adapted to lift said valve, auto- 30 matic means to seat said valve on its seat, a handle member integral with and extending from the outer end of said shank, said handle member having a curved guide opening concentric with its shank coacting with said guide pin, a second 35 shank in said operating chamber surrounding the pin of the first shank, a second handle member having its lower end supported on the second shank, a U shaped handle connecting the upper ends of said handle members and an operating 40 knob extending from said U shaped handle.

EUGENE M. DEILLER.