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FAUCET.

APPLICATION FILED JULY 8, 1904.

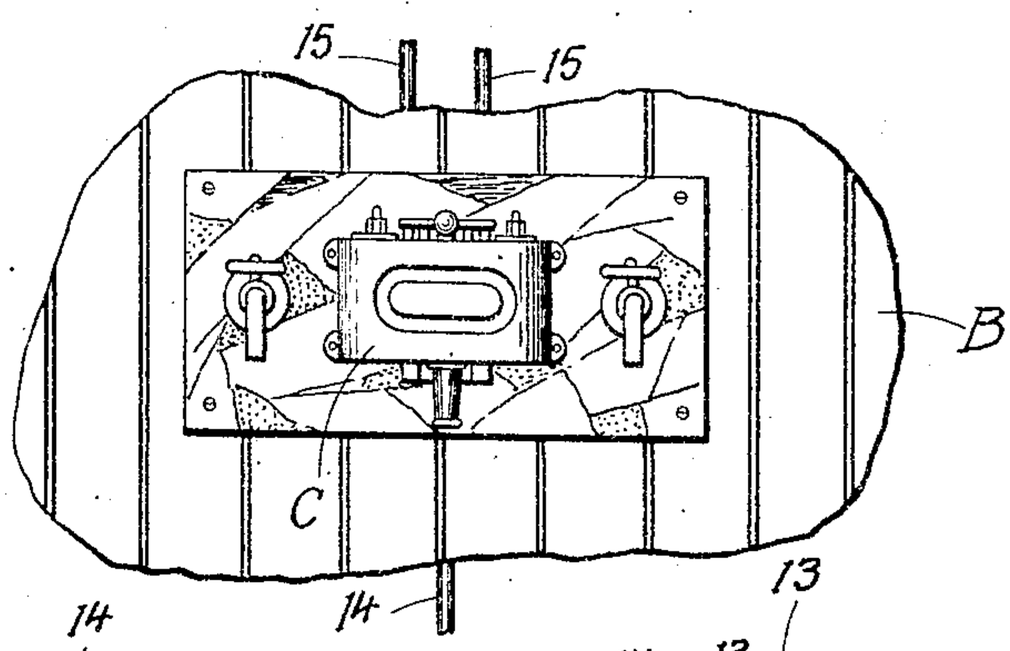

Fig. 1.

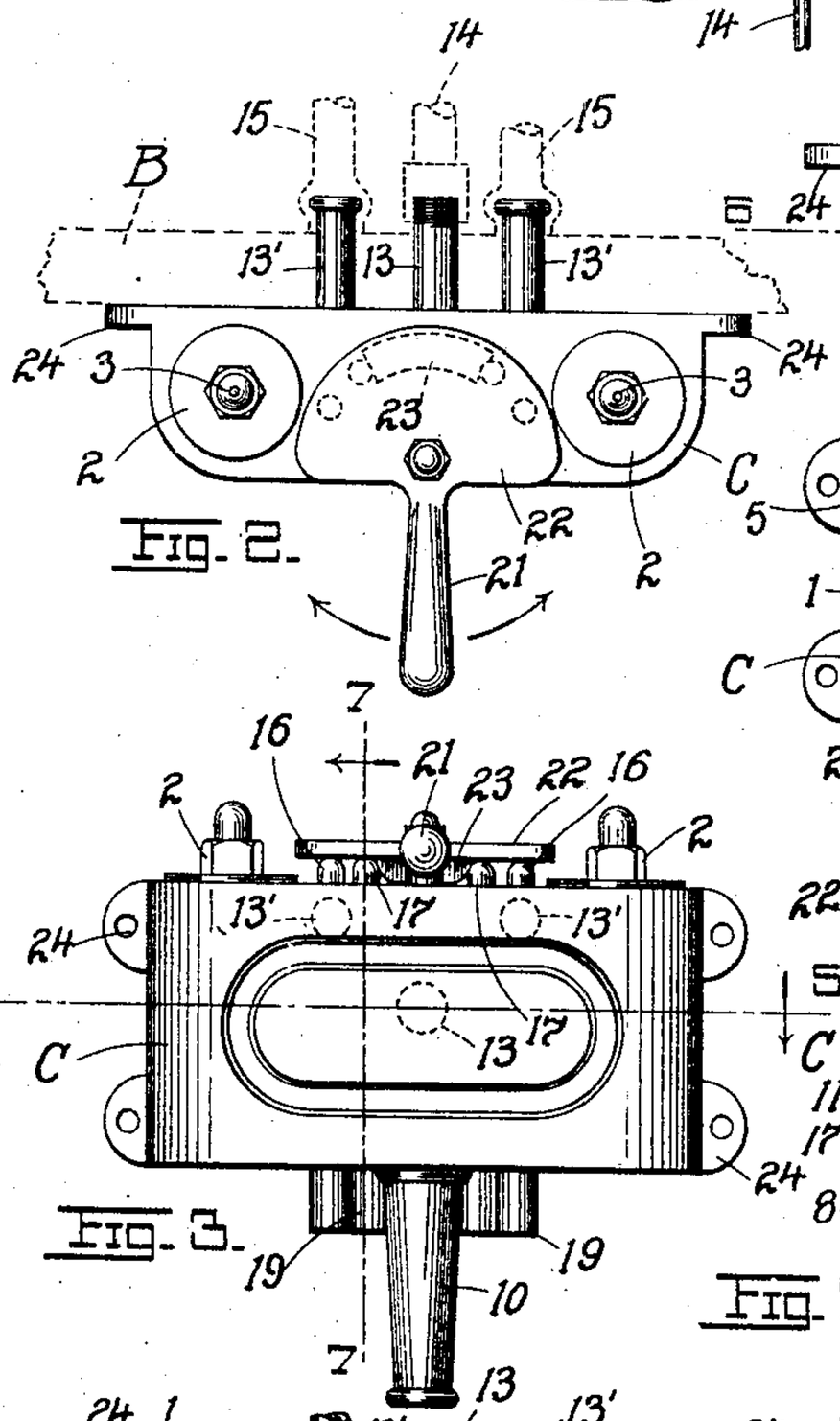

Fig. 2.

Fig. 3.

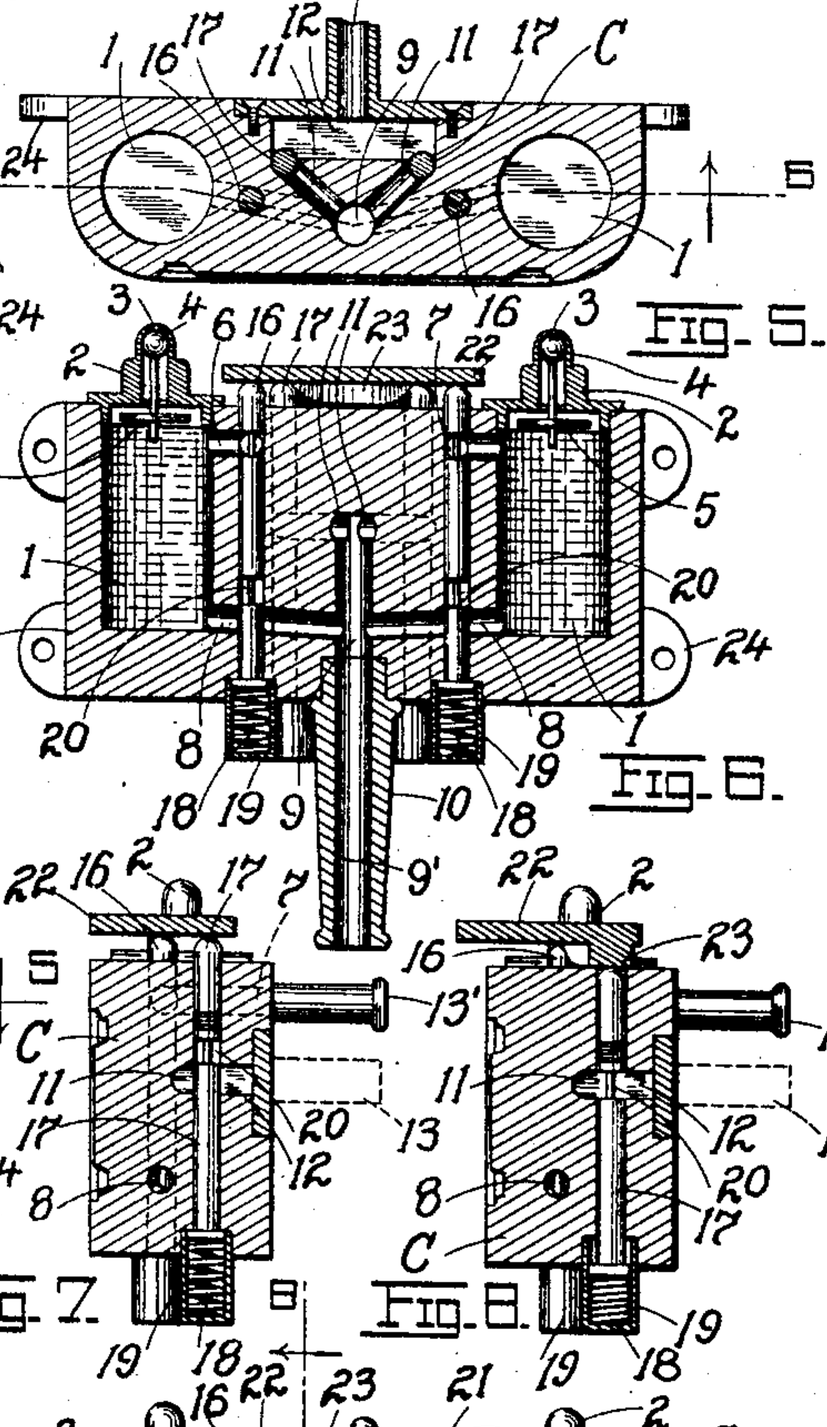

Fig. 5.

Fig. 6.

Fig. 7.

Fig. 8.

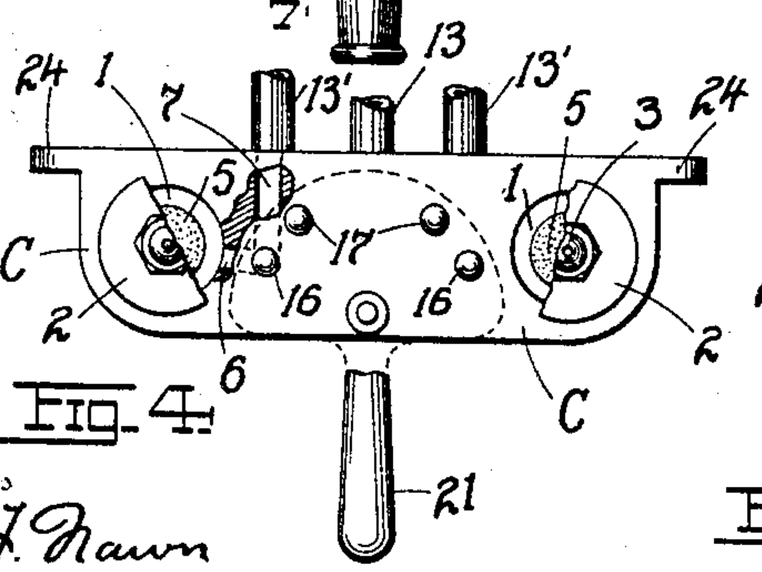

Fig. 4.

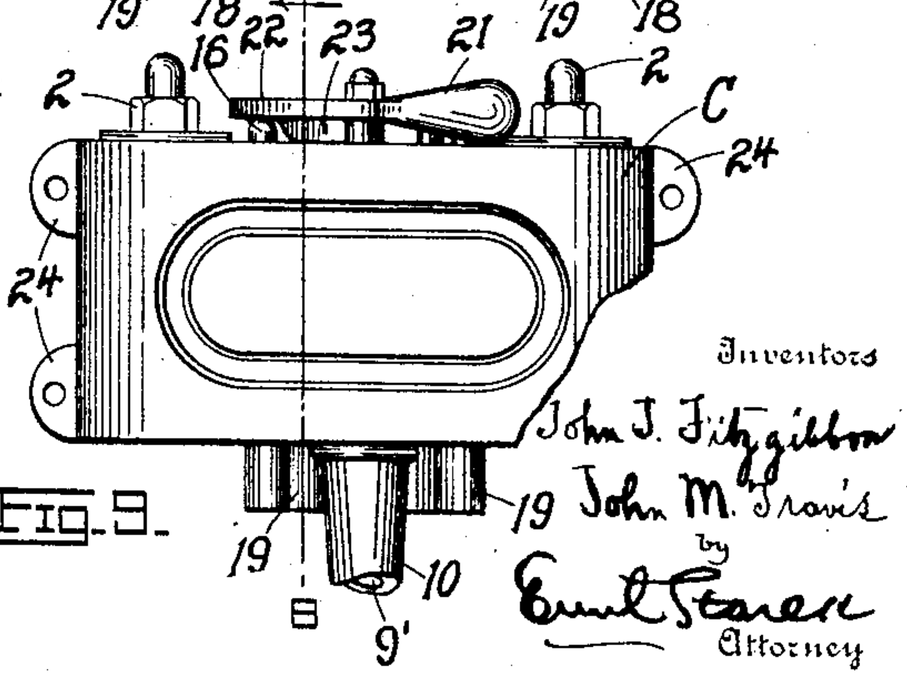

Fig. 9.

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UNITED STATES PATENT OFFICE.

JOHN J. FITZGIBBON AND JOHN M. TRAVIS, OF ST. LOUIS, MISSOURI.

FAUCET.

SPECIFICATION forming part of Letters Patent No. 785,869, dated March 28, 1905.

Application filed July 8, 1904. Serial No. 215,832.

To all whom it may concern:

Be it known that we, JOHN J. FITZGIBBON and JOHN M. TRAVIS, citizens of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Faucets, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

Our invention has relation to improvements in faucets for carbonated beverages; and it consists in the novel construction and arrangement of parts more fully set forth in the specification and pointed out in the claims.

In the drawings, Figure 1 is an elevation of a section of the wall of an ice-box, showing our invention applied thereto. Fig. 2 is a top plan of the faucet with operating-handle in its central position. Fig. 3 is a front elevation of the faucet. Fig. 4 is a top plan with parts broken away to show interior construction. Fig. 5 is a horizontal section on line 5 5 of Fig. 3. Fig. 6 is a vertical longitudinal section on broken line 6 6 of Fig. 5. Fig. 7 is a vertical transverse section on line 7 7 of Fig. 3, showing the water-controlling valve before depression. Fig. 8 is a similar section on line 8 8 of Fig. 9, showing said valve depressed; and Fig. 9 is a front elevation showing the operating-handle turned partially to the right and sufficiently to cause a depression of the valve which controls the discharge of the carbonated water.

The object of our invention is to construct a faucet for carbonated beverages or soda-waters which will effect a thorough mixture of the water and syrup within the faucet without the necessity of mixing the two in the glass from which they are served, as is now generally the case.

A further object is to dispense a uniform quantity of syrup with each glass of soda. In detail the invention may be described as follows:

Referring to the drawings, C represents a suitable casting or body portion, the same being provided with a series (two in the present case) of syrup receptacles or basins 1 1 to receive syrups of different flavor, said receptacles being disposed at each end of the casting, as shown. The top of each receptacle is closed by a hollow cap-piece or hood 2, having an air-vent 3, Fig. 6, for the escape of air during the filling of the receptacle, the vent being closed upon the filling of the receptacle by the terminal bulb 4 of a float-valve 5, which rides on top of the syrup in the receptacle and whose action is well understood. The upper ends of the syrup-receptacles have leading therefrom the passages 6 6, which communicate with the upper horizontal transverse passages 7 7, and the lower or discharge ends of the receptacles have leading from them the inclined passages 8 8, which drain into the water-discharge passage 9. The latter communicates at the bottom directly with the passage 9′ of the discharge-nozzle 10, as best seen in Fig. 6. Diverging from the upper end of the passage 9 are passages 11 11, which lead to a common chamber 12, with the rear of which communicates the nozzle or pipe-section 13, to which is coupled the pipe 14, leading from the tank (not shown) charged with the soda-water. Each of the passages 7 7 leads to the nozzles or pipe-sections 13′ 13′, to which are coupled the pipes 15 15, leading from the syrup-jars. (Not shown.)

From the foregoing it will be seen that as the syrup flows from the supply-jars into the receptacles 1 1 the latter will be filled, whence the syrup is free to flow into the passage 9, where it will, through the siphoning action of the soda-water stream, become thoroughly mixed therewith and escape eventually in such mixed condition through the nozzle 10. It is only necessary, of course, to interpose suitably-operated valves to control the flow of the respective liquids. This is accomplished as follows: Mounted to reciprocate vertically in the casting C and disposed in the line of the point of intersection between the passages 6 7 and in the line of the passages 8 are valves 16 16, and interposed in the line of the point of communication of the passages 11 with the chamber 12 are similar valves 17 17. The upper rounded ends of the several valves project slightly beyond the plane of the upper surface of the casting, being forced to said raised position by the resilient action of the springs 18 acting against the bases of the valves, the

several springs being confined in casings 19. The several valves are identical in construction, so that a description of one will suffice for all. At convenient points each valve is reduced in cross-section, leaving a short neck 20, adapted upon proper depression of the valve to come in the path of the fluid-conducting passages 6 7 8, and when the valve is so depressed it allows the fluid to flow past the neck 20, and thus find its way out of the faucet, Fig. 8. The means for effecting the necessary depression of the several valves is as follows: Mounted rotatably on top of the casing C and adapted to swing in a horizontal plane is an actuating-lever 21, of which the rounded segment 22 forms a part. The under surface of the segment 22 is provided with a curved cam-shaped lug 23, which as the lever is swung in one direction or the other successively depresses the valves 17 16 by riding over their rounded tops, the valves 17 being depressed in advance of the valves 16, Figs. 7, 8, so that if the purchaser desires soda without syrup the same can be drawn off without disturbing the syrup contents of the receptacles 1 1. In Fig. 8 we have shown the lever 21 swung sufficiently to depress the left-hand valve 17, thereby opening the passage 11 to the chamber 12 and allowing the soda-water to rush into the nozzle 10. A further turning of the lever would have depressed the corresponding valve 16 (shown raised in Fig. 6) and allowed the syrup to discharge from the receptacle 1 and become mixed with the discharging water, the valve 16 at the same time cutting off communication between the passages 6 and 7, so that refilling of said syrup-receptacle would be prevented during its discharging operation. When the lever 21 is swung to bring the cam 23 out of contact with the tops of the valves 16 17, the springs 18 restore the latter to their normal position, thus permitting refilling of the receptacles 1 1, Fig. 6, and cutting off the flow from said receptacles and also cutting off the flow of the soda-water (which is always under pressure) from the chamber 12, Fig. 7. The casting C is provided with lugs 24, by which it may be secured to the front wall of an ice-box B.

From the foregoing it will be seen that we provide a faucet which not only dispenses uniform quantities of syrup for each drink served, but insures the mixture of the syrup with the soda while the latter is passing through the faucet. In the old way where the syrup is first passed into the glass and then the soda on top of it the mixture is never thorough and the bottom is apt to be sweeter than the top.

We do not, of course, wish to be limited to the precise details here shown, as they may in a measure be departed from without in any wise affecting the nature or spirit of our invention.

Having described our invention, what we claim is—

1. A faucet comprising a body portion, having suitable syrup-receptacles, discharge-passages leading therefrom to a common discharge-nozzle, means for connecting the latter with a source of carbonated-water supply, feed-passages leading from the receptacles to suitable sources of syrup-supply, a horizontally-swinging operating-lever, and vertically-reciprocating spring-controlled valves located in position to admit the syrup or water from their respective sources of supply and permit their discharge through the nozzle upon swinging of the lever in the proper direction, substantially as set forth.

2. A faucet comprising a body portion, a centrally-disposed operating-lever mounted on the same and swinging horizontally thereover, a cam connected to said lever, a syrup-receptacle at either end of the body portion, a chamber located between the receptacles, pipe-sections leading from the chamber and receptacles to suitable sources of syrup and water, supply-passages leading to the receptacles, a discharge-passage for the water, connecting-passages between the chamber and the last-named discharge-passage, discharge-passages leading from the bottoms of the receptacles to the water-discharge passage, vertically-reciprocating spring-controlled valves normally projecting above the body portion and distributed in the path of travel of the cam carried by the lever, said valves being located in the line of the supply and discharge passages leading from the receptacles, and in the path of the passages leading from the chamber aforesaid, said valves having reduced portions for permitting the flow of the liquid past the same by the depression thereof by the cam upon the oscillation of the lever in proper direction, substantially as set forth.

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

JOHN J. FITZGIBBON.
JOHN M. TRAVIS.

Witnesses:
EMIL STAREK,
G. L. BELFRY.