

No. 677,751.

Patented July 2, 1901.

B. BARON.
SODA WATER FOUNTAIN.

(Application filed Nov. 20, 1899.)

(No Model.)

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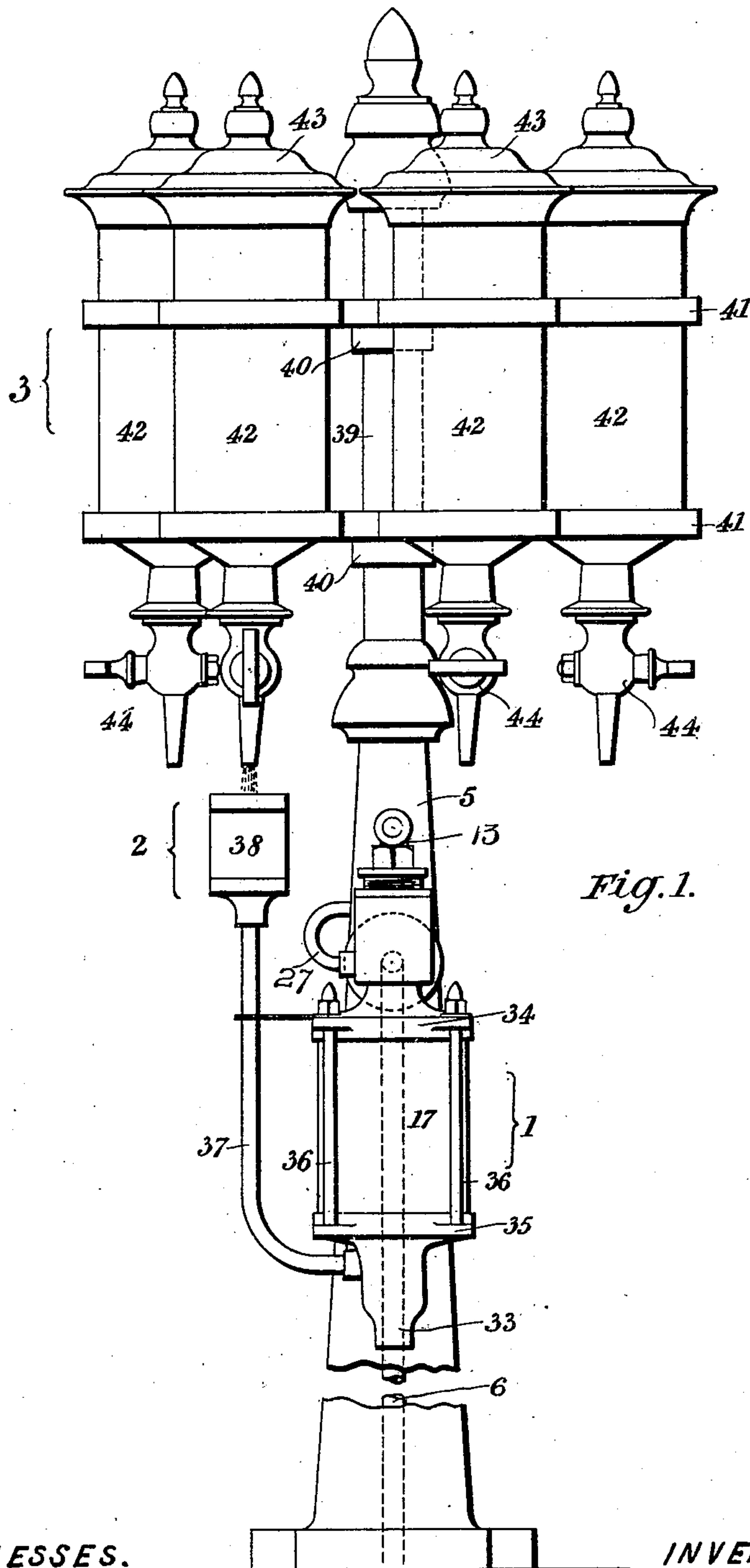


Fig. 1.

WITNESSES.

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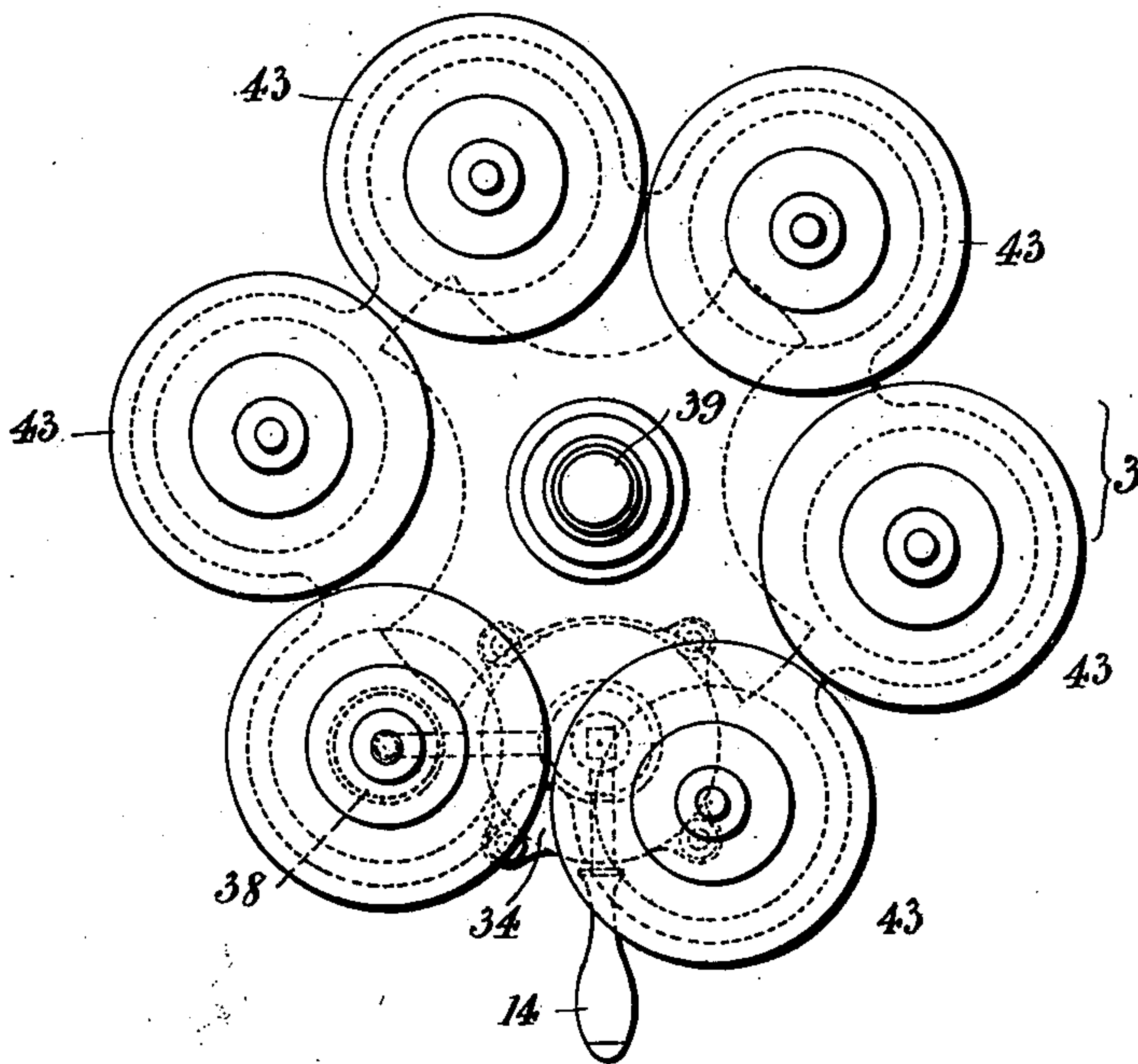
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Fig. 2.



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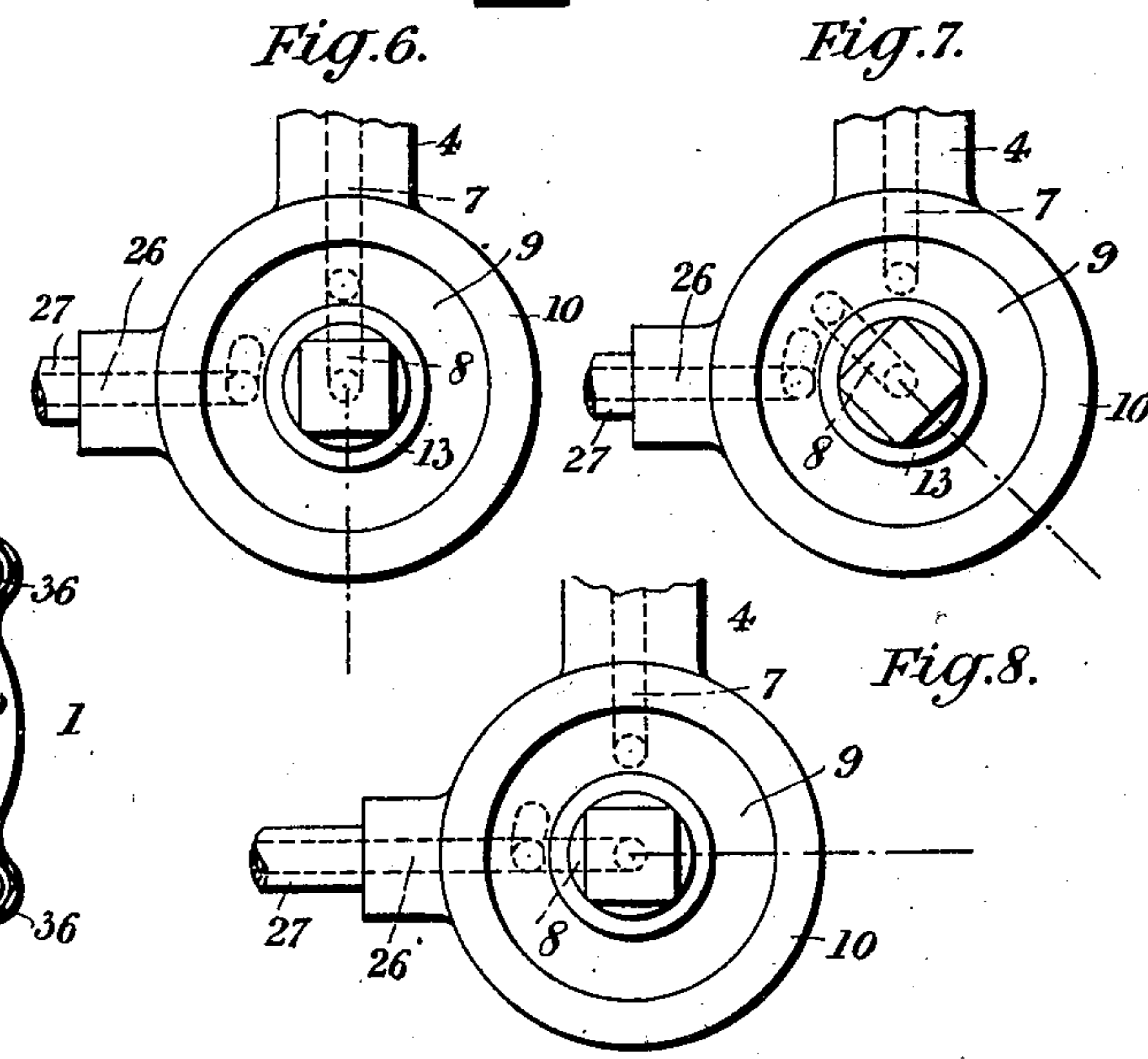
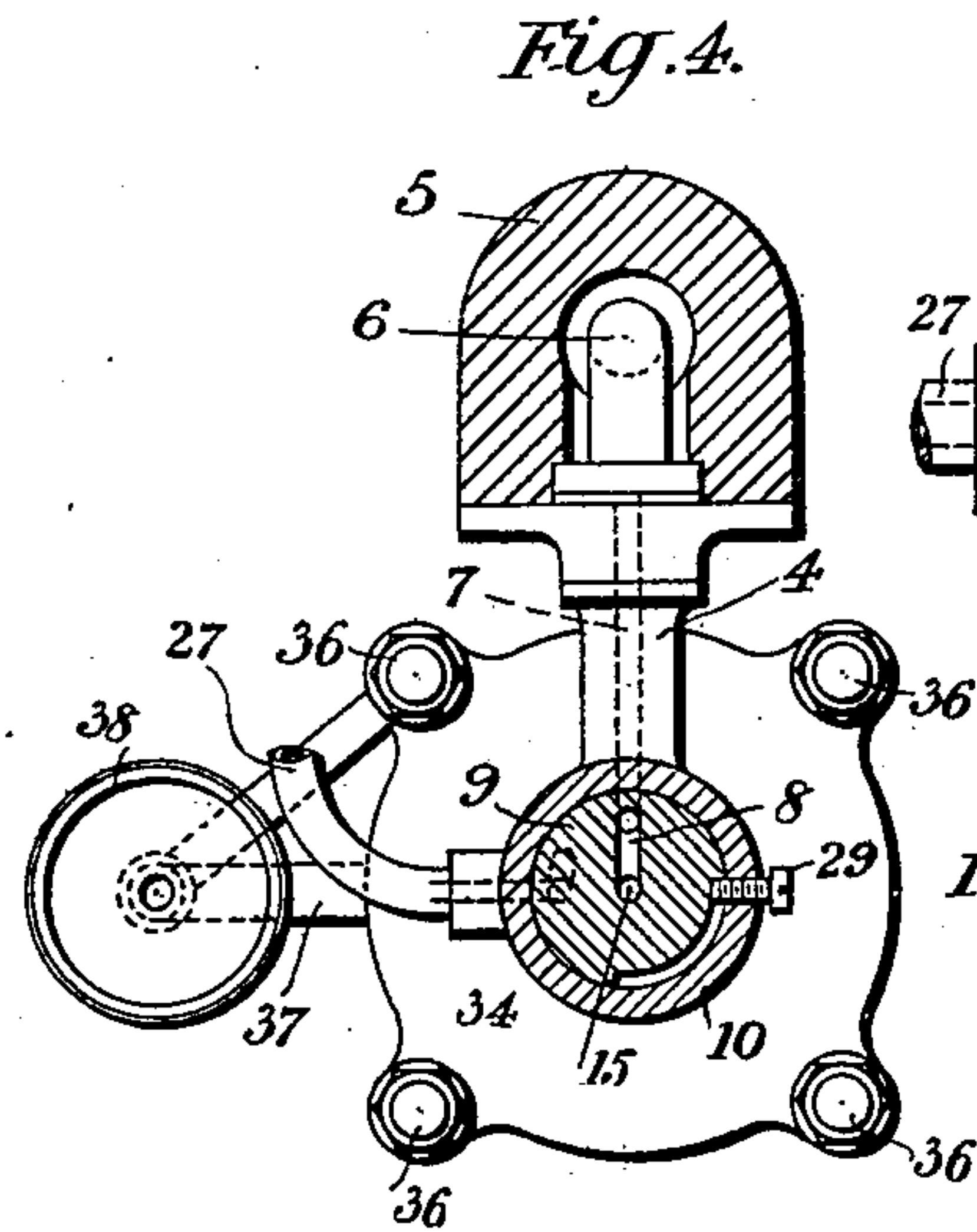
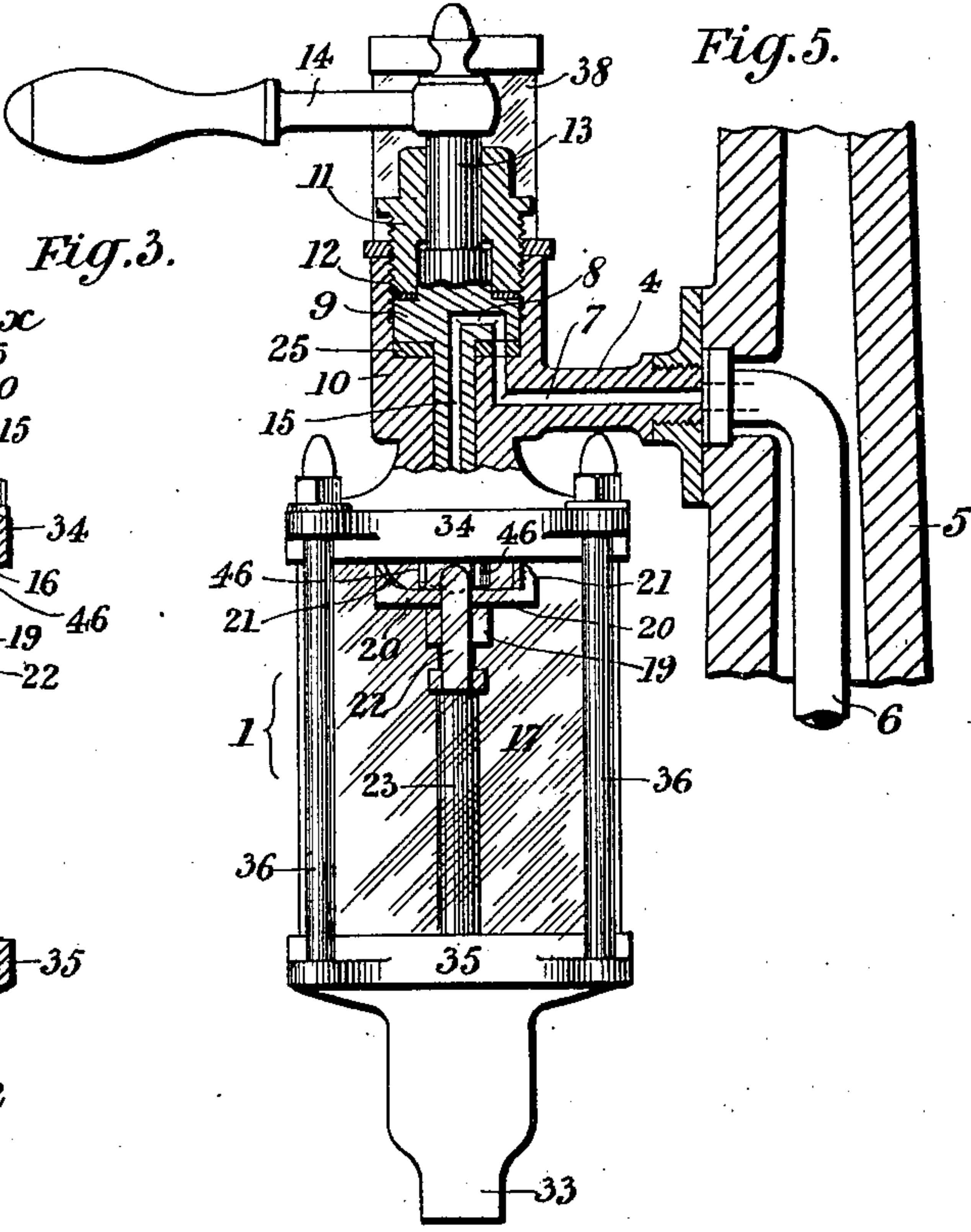
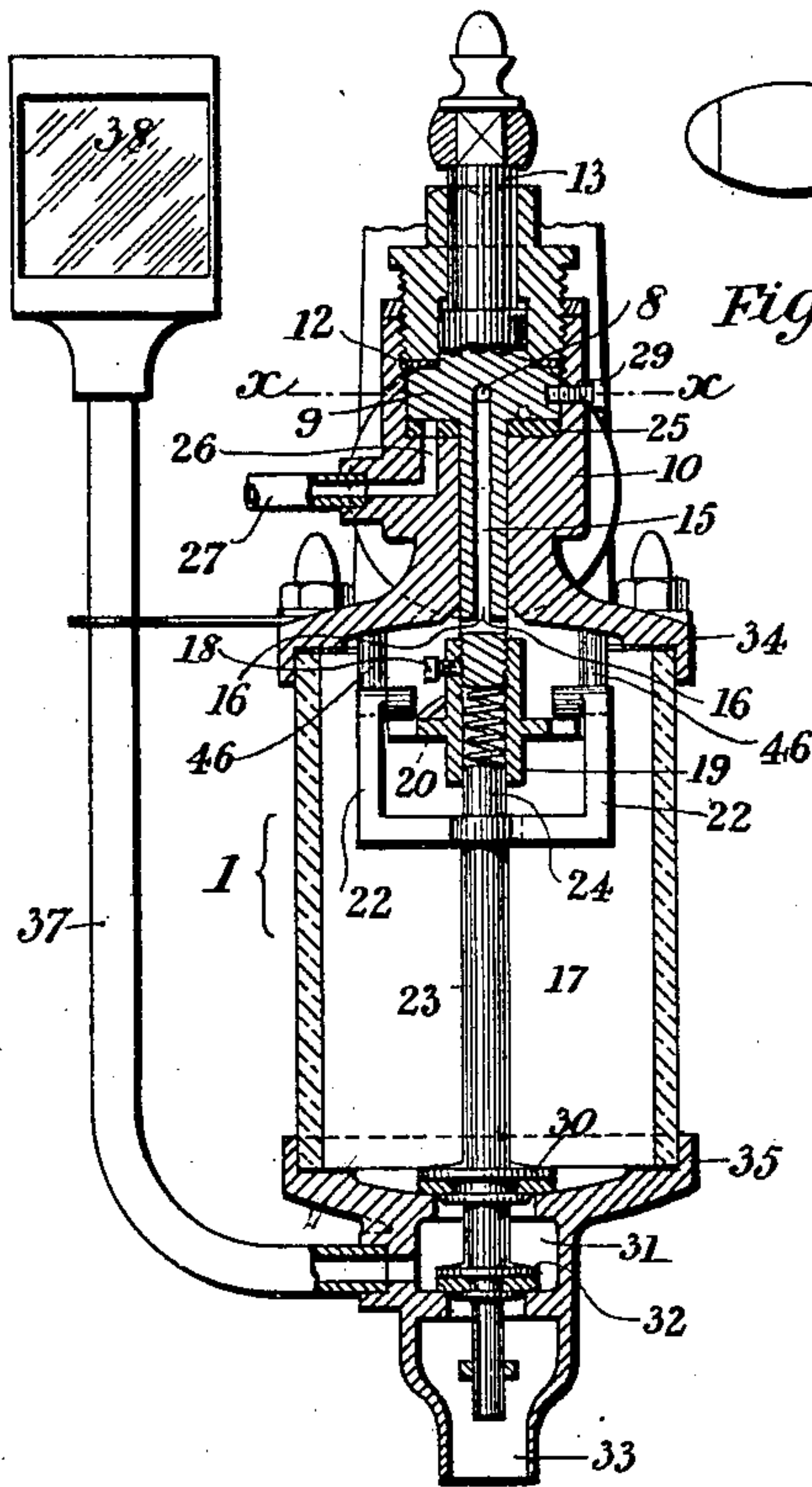
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3 Sheets—Sheet 3.



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BERNHARD BARON, OF LONDON, ENGLAND.

SODA-WATER FOUNTAIN.

SPECIFICATION forming part of Letters Patent No. 677,751, dated July 2, 1901.

Application filed November 20, 1899. Serial No. 737,671. (No model.)

To all whom it may concern:

Be it known that I, BERNHARD BARON, a citizen of the United States, residing at London, England, have invented a certain new and
5 useful Improvement in Soda-Water Fountains, of which the following is a specification.

My invention relates to an improvement in what are known as "soda-water fountains,"
10 in the use of which class of apparatus it is customary to provide various syrups and the like, which are placed in the glass into which the carbonated water is drawn in order to flavor same.

15 The object of my invention is to provide a convenient apparatus from which the carbonated water may be drawn without having its contained gas largely knocked out or released from same by the act of entering the
20 receptacle under high pressure, and to combine with same means by which a regulated quantity of the desired "syrup" (by which term I include any suitable addition) may be incorporated with the carbonated water be-
25 fore it enters the glass or receptacle.

One form of my invention is illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of the apparatus in a form adapted to be applied to a counter.
30 Fig. 2 is a plan of same. Fig. 3 is a sectional elevation, on an enlarged scale, of the drawing-off-tap part of the apparatus, the receptacle for the syrup or the like and a part of the conducting-pipe from same being in elevation. Fig. 4 is a plan of Fig. 3 on line *x x*.
35 Fig. 5 is an elevation, partly in section, of the drawing-off tap shown in Fig. 3, but taken at right angles thereto; and Figs. 6, 7, and 8 are diagrammatic plan views, on an enlarged
40 scale, of the valve-plug portion of the apparatus hereinafter described to show the different positions of the valve.

Referring to Fig. 1, it will be seen that the apparatus consists of a drawing-off tap 1,
45 provided with a chamber for containing the desired charge, to which chamber is applied a pipe carrying a measuring vessel 2, into which the various syrups or the like are run from a series of bottles or receptacles 3,
50 mounted in a frame capable of rotating on a post or extension of a pillar.

The drawing-off tap 1 is attached by an arm

4 to the pillar 5, through which passes a pipe 6, connected to a suitable machine in which water can be carbonated, preferably in large
55 quantities, a passage 7 in the arm 5 connecting with a passage 8 on a rotatable valve-plug 9 when the latter is in its open position. The valve-plug is held in a casing 10 by a screw-down gland 11, through an interposed washer
60 12, and is provided with a stem 13, passing through such gland and adapted to receive a handle 14.

Connected to the plug 9 is a hollow stem 15, passing through the casing 10, the passage in
65 such stem forming a continuation of the passage 8 in the plug. At the lower end of the stem the passage has outlets 16 into the chamber 17, and to the lower end of the stem is screwed or attached, as by a set-screw 18, or,
70 preferably, both, a sleeve 19, a pair of arms 20 of which carry cam-surfaces 21 21, adapted to act on the turned-in or hooked ends of arms 22 22, carried by a rod 23, which is provided with a projection 24, entering sleeve 19
75 and adapted to be pressed upon by a spring contained in said sleeve. The arms 22 are guided by pins 46 46, depending from the cover 34, so that they may rise between same and be prevented from turning thereby. The
80 arms 20 20 are slotted to allow them to pass the hooked ends of arms 22 when the parts are being put together.

The plug 9 seats on a leather or like washer 25, in which is a hole corresponding with the
85 passage 7, as shown in Fig. 5, and a hole corresponding to a passage 26, leading to an exit-pipe 27, as shown in Fig. 3. This hole may be elongated or slotted, as shown in Figs. 6 to 8 in dotted lines, so as to insure the plug-
90 passage 8, which is adapted to connect with it, being able to open into the passage 26 by a somewhat shorter movement than if it had to come directly over said passage. The movement of the plug 9 is limited by a set-
95 screw 29, Figs. 3 and 4, passing through the casing 10 and engaging in a slot in said plug.

The lower end of rod 23 carries a valve-disk 30, having a suitable packing adapted to normally close an opening in the lower part of
100 the chamber 17, which opening provides an entrance into a smaller chamber 31, which has, in turn, an exit-opening also normally closed by a valve-disk 32, having a suitable packing,

the latter opening forming a way to a discharge-nozzle 33. The main chamber 17 in the present instance consists of a glass cylinder having an upper cap 34, forming part of the casing 10, and a lower cap 35, the two caps being held together by rods 36, screwed at the lower ends into the lower cap and held by nuts on their screwed upper ends, which pass through ears of the upper cap.

10 Into the chamber 31 there enters a pipe 37, to the upper end of which is attached an open vessel 38, which may be marked to form a measuring vessel, if desired.

On the upper part of the pillar 5 is an extension or post 39, having collars 40 40 fixed thereon, on which are supported so as to be capable of turning two frames 41 41, consisting of rings, the lower being adapted to hold the syrup or other receptacles 42, so that they will not fall through, while the upper serves to steady them. The receptacles 42 are preferably of glass and are provided with covers 43 and outlet-taps 44. Thus the frame, with the receptacles 42, may be turned to bring any one of them over the vessel 38, so that the desired syrup or the like may be run therein.

In the operation of the apparatus the syrup passes from the vessel 38 to the chamber 31. The closed position of valve-plug 9 is that shown in Fig. 7, where it will be seen that the passage 8, communicating with the interior of chamber 17, is closed by washer 25 and the body of the plug has closed the passage 7 from pipe 6. To open the valve, the plug 9 is turned back by the handle 14, so as to bring its passage 8 into communication with passage 7 and pipe 6, as shown in Figs. 5 and 6, so that the carbonated water will pass directly to the chamber 17. The plug is then moved forward again to the position shown in Fig. 7, so that the passage 8 thereof is closed to the passage 7, a continued movement in the same direction bringing such passage 8 into communication with the passage 26 and pipe 27, as shown in Fig. 8, with the result that the interior of chamber 17 is put in communication with such escape-pipe and a sniffling of the surplus gas from the upper surface of the water in chamber 17 is obtained, with the result that the pressure in such chamber is relieved. These movements have turned the sleeve 19 into such a position that the cams 21 are just touching the hooked ends of arms 22, so that a continued movement of the handle 14 after the sniffling has been accomplished will cause the rod 23 to be raised, so as to open the valves 31 32, so that the carbonated water may commingle with the syrup or the like and enable the two to pass out together through the nozzle 33 into the consumer's glass or vessel, which is done quietly and without any rush, as the pressure has been removed, and, as it will be seen, by the movements of a single handle 14.

65 What I claim is—

1. In combination, a chamber, means for connecting same with a reservoir of carbon-

ated water, a rotatable valve-plug having a passage therein adapted to put the chamber in connection with the reservoir and with a gas-sniffling passage alternately, an outlet-valve for the chamber and means for opening same connected with the rotatable valve-plug and controlled by the movement of same substantially as described.

2. In combination, a chamber, means for connecting same with a reservoir of carbonated water a rotatable valve-plug having a passage therein adapted to put the chamber in connection with the reservoir and with a gas-sniffling passage alternately an outlet-valve for the chamber, a rod carrying such valve means connecting the rod and rotatable valve-plug so that a movement of the latter will open and close the outlet-valve and a handle for rotating the valve-plug substantially as described.

3. In combination, a chamber, means for connecting same with a reservoir of carbonated water, a rotatable valve-plug having a passage therein adapted to put the chamber in connection with the reservoir and with a gas-sniffling passage alternately, a hollow stem to such plug, an outlet-valve for the chamber, a rod carrying such valve, arms carried by such rod, arms carried by the hollow stem, cam-surfaces on such arms adapted to act on the arms of the rod and raise same together with the outlet-valve when the valve-plug is turned into one position and a spring adapted to restore the rod and valve substantially as described.

4. The combination with a chamber, of a valve adapted to permit carbonated water to pass to said chamber and to sniff the excess of gas from the upper surface of said water, of a receiving vessel for syrup connected to said chamber, a valve for permitting the mixing of the water with the syrup, a valve for allowing the discharge of the water so treated, a series of receptacles for syrup and means for revolvably mounting them above the receiving vessel so that any one may be brought over such receiving vessel substantially as described.

5. In combination, a chamber, a valve adapted to permit carbonated water to pass to said chamber and to sniff the excess of gas from the upper surface of the water, a second chamber connected to the first, a valve for normally closing the connection between the chambers, means connecting the two valves whereby the second is opened by the first after the sniffling has taken place, and a third valve controlling an outlet from the second chamber and connected to the second valve, said third valve being opened on the opening of the second to allow the treated water to flow out substantially as described.

6. In combination, a frame, a series of receptacles for syrup held in same a pillar extension on which said frame is revolvably mounted, a tap for each receptacle, a pillar carrying the extension, and also a pipe con-

nected with a supply of carbonated water, a tap attached to such pillar having means for holding a charge of carbonated water, and for snifting the gas from the surface of same and a vessel carried by such tap and situated in the path of revolution of the receptacles to receive syrup from same, and adapted to pass it to the charge before it leaves the tap substantially as described.

7. In apparatus for supplying aerated liquids, the combination with the reservoir containing the aerated liquid, of an intermediate chamber provided with two compartments, a two-way valve located near the upper part of one of said compartments, a double valve located within the other compartment and adapted to control openings leading from the first to the second mentioned compartment and also openings leading from the last-mentioned compartment to the outlet of the apparatus; a handle for operating the two-way valve, means for actuating the said double valve through a rod connecting the said means with the said handle, and an external conduit leading to the last-mentioned of the aforesaid two compartments substantially as and for the purpose specified.

8. In apparatus for supplying aerated liquids, the combination with the reservoir containing the aerated liquid, of the rotary frame carrying a series of vessels containing other liquids to be mixed with the aerated liquid,

the intermediate chamber formed with two compartments, one adapted to receive the aerated liquid and means for regulating the admission of the liquids to and their escape from said intermediate chambers substantially as and for the purpose specified.

9. In apparatus for supplying aerated liquids, the combination with the aerated-liquid reservoir, of a rotary frame carrying a series of vessels containing other liquids to be mixed with the aerated liquid, an intermediate chamber formed with two compartments located one above the other, a double valve situated at the bottom of said chamber and adapted to control the flow of the liquids from the said compartments to an outlet, a two-way valve situated at the top of the said chamber and adapted to control the flow of the liquid from the aerated-liquid reservoir into the upper compartment and the escape of the superfluous gas from said compartment and means for connecting said valves together so that they can be moved by a single handle substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

BERNHARD BARON.

Witnesses:

PHILIP M. JUSTICE,
ALLEN PARRY JONES.