(No Model.)

A. SCHIER.

SODA FOUNTAIN.

No. 491,272. Patented Feb. 7, 1893.

Fig. 1.

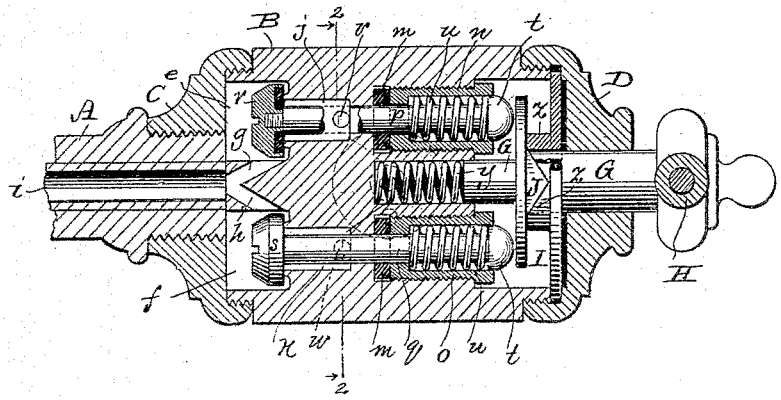


Fig. 2.

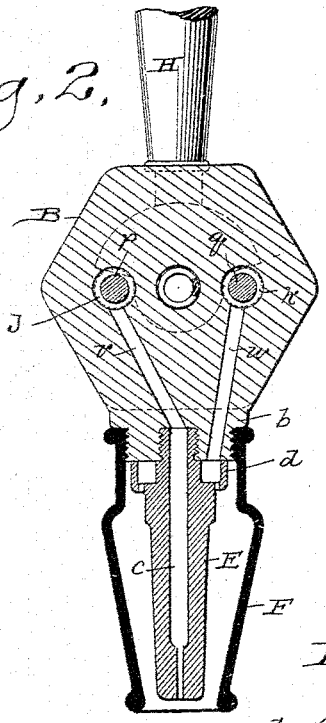


Fig. 4.

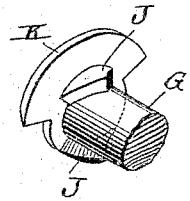


Fig. 5.

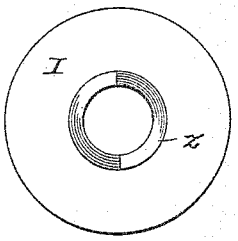


Fig. 3.

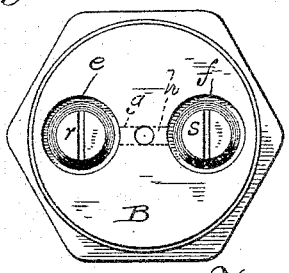
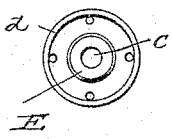


Fig. 6.



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ADOLPH SCHIER, OF CHICAGO, ILLINOIS.

SODA-FOUNTAIN.

SPECIFICATION forming part of Letters Patent No. 491,272, dated February 7, 1893.

Application filed May 2, 1892. Serial No. 431,555. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH SCHIER, a citizen of the United States, and a resident of Chicago, in the county of Cook, and in the State of Illinois, have invented certain new and useful Improvements in Soda-Fountains; and I do hereby declare that the following is a full, clear, and exact description thereof.

The prime object of my invention is to provide a draft-apparatus, for soda-fountains, in which either of two cut-off valves, forming part of this apparatus, may be unseated by a single hand-lever, said valves being ordinarily for the control of the inlets to what is known to the trade as the "squirt" and "slobber" of a cold soda-fountain, although at times one of these valves may be utilized as a means for contolling the waste outlet of a hot soda-fountain.

My invention therefore consists in certain peculiarities of construction and combination of parts to be hereinafter described with reference to the accompanying drawings and subsequently claimed.

In the drawings: Figure 1 represents a horizontal section of a soda-fountain draft-apparatus constructed according to my invention, Fig. 2 a vertical transverse section of the same taken on line 2—2 of the preceding figure, Fig. 3, a rear view of the apparatus with its draft-arm coupling-cap detached, Fig. 4, a perspective view of a portion of a lever and spring controlled stem provided with cam-lugs and a valve-actuating plate, Fig. 5, an inner face view of a plate that is provided with a central sleeve having cam-notches for engagement with the cam-lugs on the lever and spring controlled stem, and Fig. 6 is a detail plan view of the discharge tip that constitutes part of said draft-apparatus.

Referring by letter to the drawings A represents a portion of the draft-arm of a soda-fountain, and B a valve-chest that constitutes part of my invention, this valve chest being made, of any preferred circumferential contour, from brass or other suitable non-corrosive metal and having its ends in the form of screw-caps C, D, the first of which has a central screw-threaded opening for engagement with the correspondingly screw-threaded end of said draft-arm. Depending from the valve-chest is a boss *b* having a central screw-threaded opening for engagement with corresponding threads on the upper end of a discharge tip E, and said boss is exteriorly screw-threaded to engage the threads upon the interior of a hard rubber nozzle F, the latter being common in the art of soda-fountains and employed in this instance more as a matter of finish or ornament than otherwise. The discharge tip E has a central passage *c* throughout its length, but the lower end of this passage is considerably reduced, as shown in Fig. 2, to constitute what is generally termed the "squirt." Adjacent to its upper end the discharge tip is in the form of a cup *d* that closes against the boss *b*, depending from the valve-chest B, and as I provide the bottom of this cup with a series of perforations it constitutes what is generally termed, the "slobber."

The valve-chest B, adjacent to its end-cap C is in the form of chambers *e*, *f*, in respective communication with passages *g*, *h*, that converge together and join the passage *i* in the draft-arm A, above described. However it is practical to do away with that portion of the valve-chest having the converging passages therein and thus form one chamber instead of the two herein shown, and such a variation would not be a departure from what I consider is my invention in its broadest sense.

Leading forward from the chamber *e*, *f*, are passages *j*, *k*, that are enlarged and screw-threaded at their outer ends to receive suitable packing *m* and engage correspondingly threaded sleeves *n*, *o*, as shown in Fig. 1. Extending through the passages *j*, *k*, packings *m* and sleeves *n*, *o*, are stems *p*, *q*, shown as having their rear ends in screw-threaded engagement with suitable valves *r*, *s*, for said passages, and the outer ends of each stem is provided with a head *t* that abuts against a spiral spring *u* arranged in the adjacent one of the screw-threaded sleeves above described.

Leading from the passage *j* in the valve-chest, to the passage *c* in the discharge-tip is a branch *v*, and a branch *w* connects the valve-chest passage *k* with the cup portion *d* of said discharge-tip.

Intermediate of the stems *p*, *q*, the valve-chest is provided with a seat *x* for a spiral spring *y* that opposes a stem G that has its bearing in the detachable end-cap D of said

valve-chest and is square-fitted, or otherwise made fast, at its outer end to a hand-lever H, the latter being shown in Figs. 1 and 2.

Intermediate of the valve-chest and its outer end-cap, I arrange a plate I provided upon its inner face with a cam-notched central sleeve *z* that engages with cam lugs J on the stem G, although it is practical to omit said plate and provide said end-cap with the cam-notches without departing from the spirit of my invention.

In rear of the cam-lugs J, the stem G is provided with a segment plate K, preferably beveled on its radial edges, and this plate is normally intermediate of the heads of both valve-stems *p*, *q*, although it exerts pressure on but one of said heads at a time, accordingly as the hand-lever H is moved to the right or left.

In practice the normal position of the hand-lever is that shown in the first two figures of the drawings and if turned in either direction the spring *y* is contracted by the pressure of the stem G thereon. Consequently the expansion of the spring will cause an automatic return of the hand lever to its normal position if not brought back by the operator after being moved to the right or left. If the hand-lever be moved in one direction the action of the cam-lugs J, on the stem G, in the correspondingly notched sleeve *z* will cause the plate K on said stem to act against the stem *p* and force the valve *r* away from its seat whereby a stream from the soda-fountain will find its way through the passage *j* and branch *v*, in the valve-chest, to discharge with force through the passage *c* in the tip E above described. The hand-lever being returned to its normal position the spring *u*, previously contracted, will expand against the head of the stem *p* to force the latter outward and thereby automatically bring the valve *r* to its seat. The hand-lever being moved in a direction opposite to that necessary to unseat the valve *r* will cause a push of the plate K on the stem *q* to overcome the pressure of its controlling spring and thereby unseat the valve *s* to permit of a stream from the soda-fountain finding its way through the channel *k* and branch *w* into the cup portion *d* of the discharge-tip E to drizzle out through the perforated bottom of said cup.

By having the radial edges of the plate K beveled, it will come gradually on and off the valve-stem heads to render the action as easy as possible.

The draft-apparatus shown and described, is for use in connection with a cold soda-fountain, but, by a mere matter of fitting, it can be as readily employed in connection with a so called, hot soda-fountain, one of the valve controlled passages being in connection with the central aperture of the discharge-tip, and the other of the valve-controlled passages in connection with a waste-outlet for the water that accumulates from time to time in the draft-arm of said fountain and becomes chilled.

Having now fully described my invention what I claim and desire to secure by Letters-Patent is:—

1. In a soda-fountain draft-apparatus, the combination of a pair of automatic seating valves, a pivotal plate reciprocative at right-angles to its rotation and arranged to come in opposition to the stem of either valve, and a single hand-lever controlling the plate, whereby each valve may be unseated by the same means independent of the other, substantially as set forth.

2. In a soda-fountain draft-apparatus, the combination of a pair of automatic seating valves, a spring-controlled pivotal plate reciprocative at right angles to its rotation and arranged to come in opposition to the stem of either valve, and a single hand-lever connected to the plate, whereby each valve may be unseated by the same means independent of the other, and said lever automatically returned to its normal position, substantially as set forth.

3. In a soda-fountain draft-apparatus, the combination of a pair of automatic seating valves, a pivotal spring-controlled stem reciprocative at right angles to its rotation, a plate carried by the stem to come in opposition to the stem of either valve, and a hand lever connected to said stem, substantially as set forth.

4. In a soda-fountain draft-apparatus, the combination of a chest provided with two independent valve-controlled passages, a discharge-tip that depends from the chest and has a central aperture communicating with one of the passages and a perforated cup communicating with the other of said passages; and a single lever and spring-controlled push-plate arranged to come in opposition to the stem of either valve independent of the other, substantially as set forth.

5. In a soda-fountain draft-apparatus, the combination of a chest having two independent outlet passages, cut-off valves for the passages provided with spring-controlled stems, a spiral spring seated in the chest intermediate of the valve-stems, a pivotal stem in opposition to this spring, a segment plate and cam-lugs on the latter stem, a cam-notched sleeve engaging the cam-lugs, and a single hand-lever fast to the stem that carries said lugs, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Chicago, in the county of Cook and State of Illinois, in the presence of two witnesses.

ADOLPH SCHIER.

Witnesses:
THOMAS B. CLOPESY,
LUTHER P. FRIESTEDT.