T. LIEB.

Apparatus for Drawing Effervescent Liquids.

**No. 228,910.** **Patented June 15, 1880.**

*Fig. 2.*

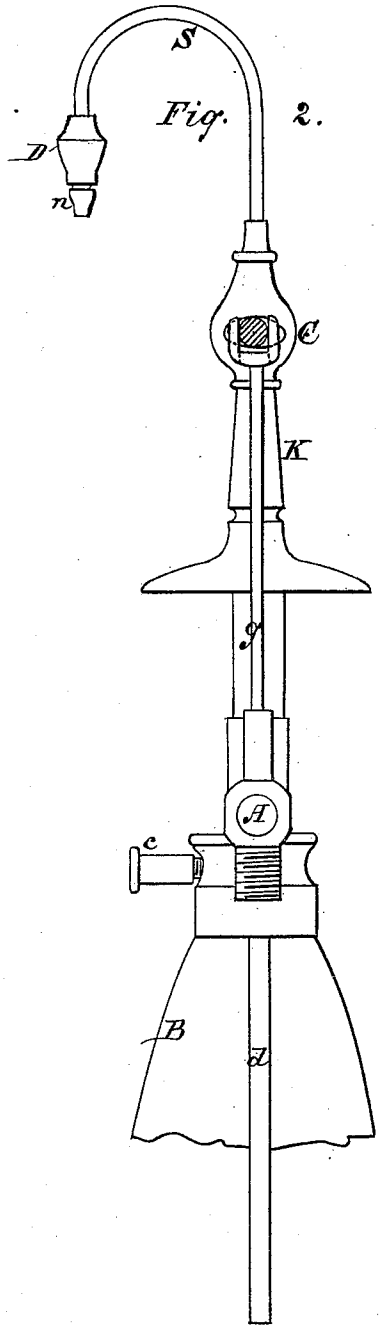
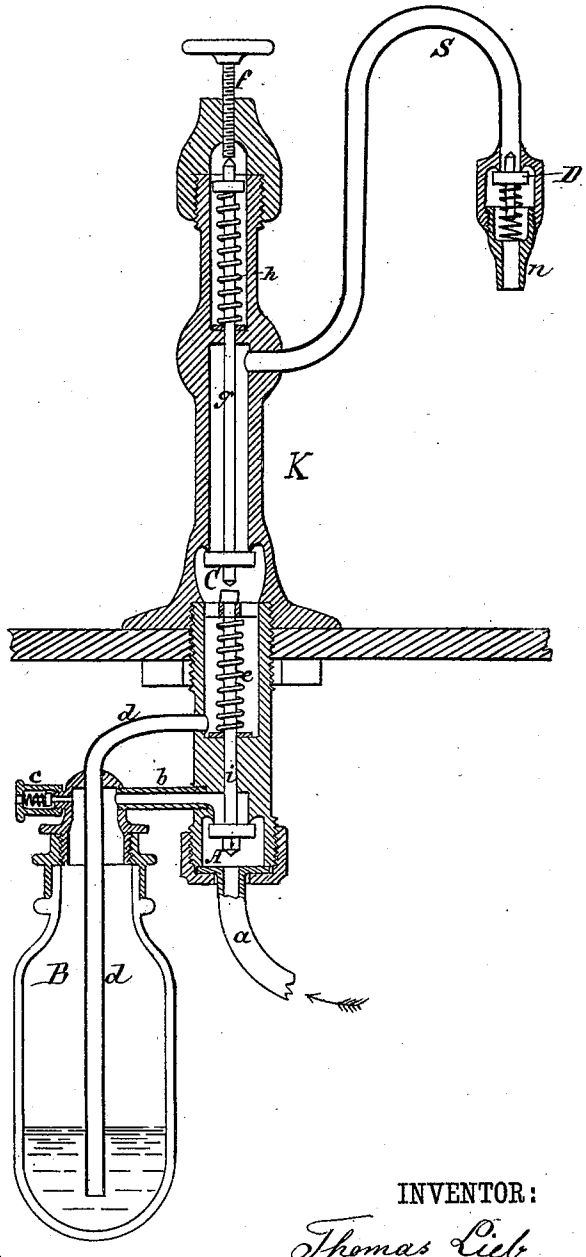



*Fig. 1.*

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## APPARATUS FOR DRAWING EFFERVESCENT LIQUIDS.

SPECIFICATION forming part of Letters Patent No. 228,910, dated June 15, 1880.

Application filed November 22, 1879.

*To all whom it may concern:*

Be it known that I, THOMAS LIEB, of Woodhaven, in the county of Queens, in the State of New York, have invented a new and useful Improvement in Apparatus for Drawing Effervescent Liquids, of which the following is a specification.

My invention consists in providing the discharge-spout of an apparatus for drawing effervescent liquids with an adjustable spring-valve, by which the liquid is discharged at a fixed pressure.

It further consists in a certain combination of a spout, a pressure-relieving vessel, and valves, whereby excessive pressure in the relieving-vessel or cooler is prevented.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a vertical section of my apparatus. Fig. 2 is an elevation of a modification of the same.

*a* is a pipe connected with a barrel or any other vessel or apparatus containing and supplying the effervescent liquid. A is a valve controlling the flow of liquid through the pipe *a*. *b* is a short pipe connecting the valve A with the top of the vessel B.

B is a pressure-relieving vessel, which may be made of any shape or material. This vessel is generally used as a cooler and placed in a refrigerator.

*c* is a relief-valve in the top or cap of vessel B, to come into operation in case of choking of the parts leading from B to the discharge-spout. *d* is a pipe rising from near the bottom of the vessel B and passing through the closed top or cap, and communicates with the interior of the tube *e*.

C is a valve controlling the flow of liquid from the vessel B to the spout. *f* is a set-screw, operated by the finger wheel or knob, by which the valve C is pressed down through the intervening stem *g*. The valve is forced up by a spring, *h*.

The lower end of the stem *g* projects downward to within a short distance from the upper end of the stem *i* of the valve A, so that after the valve C is opened a further depression of its stem *g* causes the valve A to be opened, admitting liquid into the vessel B.

K is a stand-pipe to be secured on the top of the counter in a vertical position. It may project horizontally from the side of a refrigerator or be otherwise secured.

S is a spout, the end of which is provided with an adjustable spring-valve, D, the spring being supported by a screw-nipple, *n*, by which the tension of the spring is adjusted.

The valve D is provided with a stem, setting within the coiled spring, which latter is supported by a shoulder in the screw-nipple, and said valve serves to close the end of the spout S, being held in a closed position until the pressure of the liquid forces the valve down against the action of the spring, and thereby permits the flow of the liquid out through the spout.

By the above-described arrangement the pressure on the vessel B can never exceed a certain limit, since the connection with the supply is always closed before the valve C is closed, while the valve C is opened first, the pressure in the vessel B being regulated by the tension of the spring which closes the valve D.

In the modification, Fig. 2, the two valves A and C are operated by different mechanism. The key of the valve C is turned by a thumb-piece at its end, while an eccentric on the key depresses the valve A through the rod *g*.

What I claim is—

1. In an apparatus for drawing effervescent liquids, a spout, S, provided at its end with an adjustable spring-valve, D, which yields to any excess of pressure, substantially as and for the purpose specified.

2. In an apparatus for drawing effervescent liquids, a pressure-relieving vessel, a valve, A, controlling the flow to the pressure-relieving vessel B, a valve, C, controlling the flow from the pressure-relieving vessel to the discharge-spout S, and means for operating the two valves by one knob or handle in such a manner that when drawing liquid the latter valve is first opened, while in closing the valve A, controlling the flow to the pressure-relieving vessel, is first closed, substantially as and for the purpose specified.

3. In an apparatus for drawing effervescent liquids, a pressure-relieving vessel, B, a discharge-pipe, S, provided at its end with an adjustable spring-valve, D, a valve, A, controlling the flow to the pressure-relieving ves-

sel B, a valve, C, controlling the flow from the pressure-relieving vessel to the discharge-spout S, and means for operating these two valves by one knob or handle in such a manner that when drawing liquid the latter valve is first opened, while in closing the valve A, controlling the flow to the pressure-relieving vessel, is first closed, substantially as specified.

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