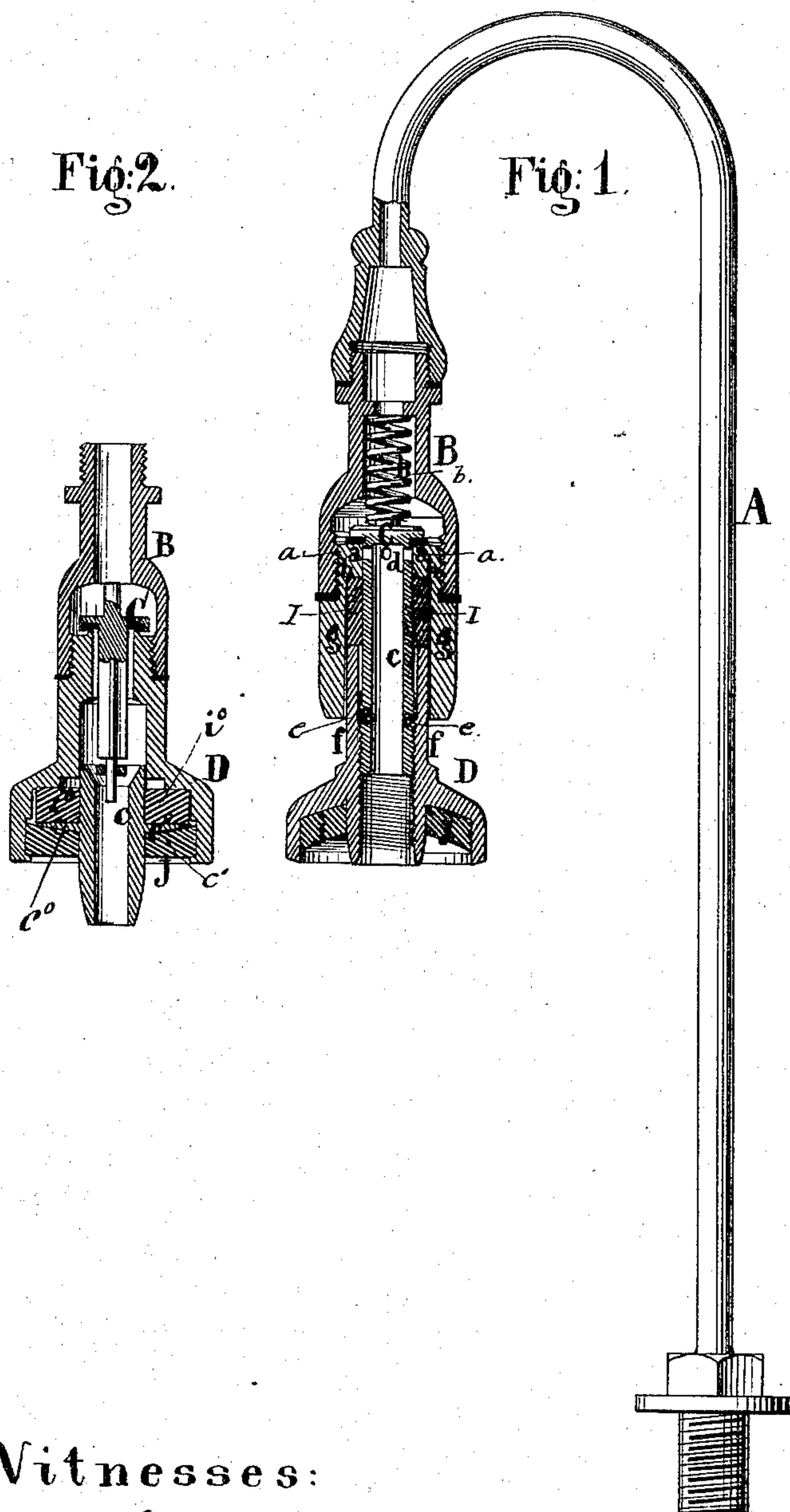


T. WARKER.

Apparatus for Drawing Effervescent Liquids.

No. 157,433.

Patented Dec. 1, 1874.



Witnesses:

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN APPARATUS FOR DRAWING EFFERVESCENT LIQUIDS.

Specification forming part of Letters Patent No. 157,433, dated December 1, 1874; application filed May 27, 1874.

To all whom it may concern:

Be it known that I, THOMAS WARKER, of the city, county, and State of New York, have invented certain new and Improved Apparatus for Drawing Effervescent Liquids, of which the following is a specification:

This invention is illustrated in the accompanying drawing, which represents a longitudinal central section thereof.

This invention consists in the combination of a cap with a stop-valve, and with a pipe leading to the fountain or vessel from which the liquid is to be drawn, the tubular shank of said cap being made to fit in a socket containing an elastic packing-ring in such a manner that, when the vessel which is to be filled is pressed against the cap, the elastic packing-ring is firmly compressed and the stop-valve is raised from its seat, thus allowing the liquid from the fountain to pass into the receiving-vessel without waste or leakage.

In the drawing, the letter A designates a pipe, which extends from a vessel or fountain containing an effervescent liquid, such as champagne or carbonic acid, water, or any other liquid of a similar nature. To the discharging end of this pipe is secured a valve-chamber, B, in which is formed a seat, *a*, for the valve C, and a spring, *b*, serves to hold this valve down on its seat. Said valve is provided with a tubular stem, *c*, which is provided with holes *d*, through which the liquid escapes when the valve is raised from its seat. On the lower end of this tubular valve-stem is a screw-thread, *e*, which fits a screw-thread in the interior of a tube, *f*, which rises from the cap D and extends into a socket, *g*, made in the casting, the upper surface of which forms the valve-seat. This socket is provided with a shoulder, *h*, against which is placed a packing-ring, *i*; and the tubular extension *f* of the cap D bears against this packing-ring, which is made of india-rubber or other elastic material, so that, when the cap is pressed upward, said packing-ring will be compressed sufficiently to allow the valve to rise from its seat. The cap D is lined with a packing-ring, *j*, of thick india-rubber, so that, when a bottle is pressed up against said cap, a tight joint

will be produced between the mouth of the bottle and the cap.

In order to draw liquid from the fountain the mouth of the bottle or receiving-vessel is placed into the cap D, and, by pressing up against said bottle, the tubular extension of the cap is forced up against the packing-ring *i*, and, as this packing-ring is compressed, the joint between the tubular extension of the cap and the packing-ring is rendered perfectly tight, and thus preventing the passage of liquid down between the shank of the valve and the packing, and its entrance into and through the screw-thread of the cap and the valve-shank. At the same time the valve is raised from its seat, and the liquid from the fountain passes into the receiving-vessel. When the receiving-vessel has been filled to the desired point the pressure against it is gradually reduced, so that the stop-valve will close before the joint between the cap and the mouth of the receiving-vessel is broken, and thereby all waste or spilling of liquid is avoided.

In Fig. 2, I have shown a modification of my invention. In this case the cap D is firmly connected to the valve-chamber B, and the tubular valve-stem *c* is provided with a flange, *c'*, which bears against the packing-ring *i'*. In front of this flange is placed the packing-disk *j*. The tubular stem *c* may be firmly connected to the valve, or it may be provided with a bridge to receive a pin projecting from the valve.

When the receiving-vessel is pressed against its seat the disk *j* is first compressed, so as to close the mouth of said receiving-vessel; then the ring *i'* is compressed and the valve is raised from its seat. The liquid, on discharging into the receiving-vessel, is kept under the same pressure which exists in the fountain, and when the receiving-vessel is removed from the cap D the free gas escapes, and the liquid in the receiving-vessel can be poured into a tumbler without destroying its life.

If an effervescent liquid, such as champagne or effervescent lemonade, is drawn directly into a tumbler from a fountain or vessel under pressure, most, if not all, the gas contained in said liquid escapes with the foam, and the re-

maining liquid in the tumbler has lost all its life. By my apparatus champagne or other liquid of a similar nature can be dispensed directly from a cask or fountain in any desirable quantity.

What I claim as new, and desire to secure by Letters Patent, is—

The combination of the cap D, a stop-valve having a shank connected with the sliding cap,

and a pipe leading to the vessel containing the effervescent liquid, with an elastic packing arranged between the sliding cap and the seat of the stop-valve, substantially as and for the purpose described.

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Witnesses:

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