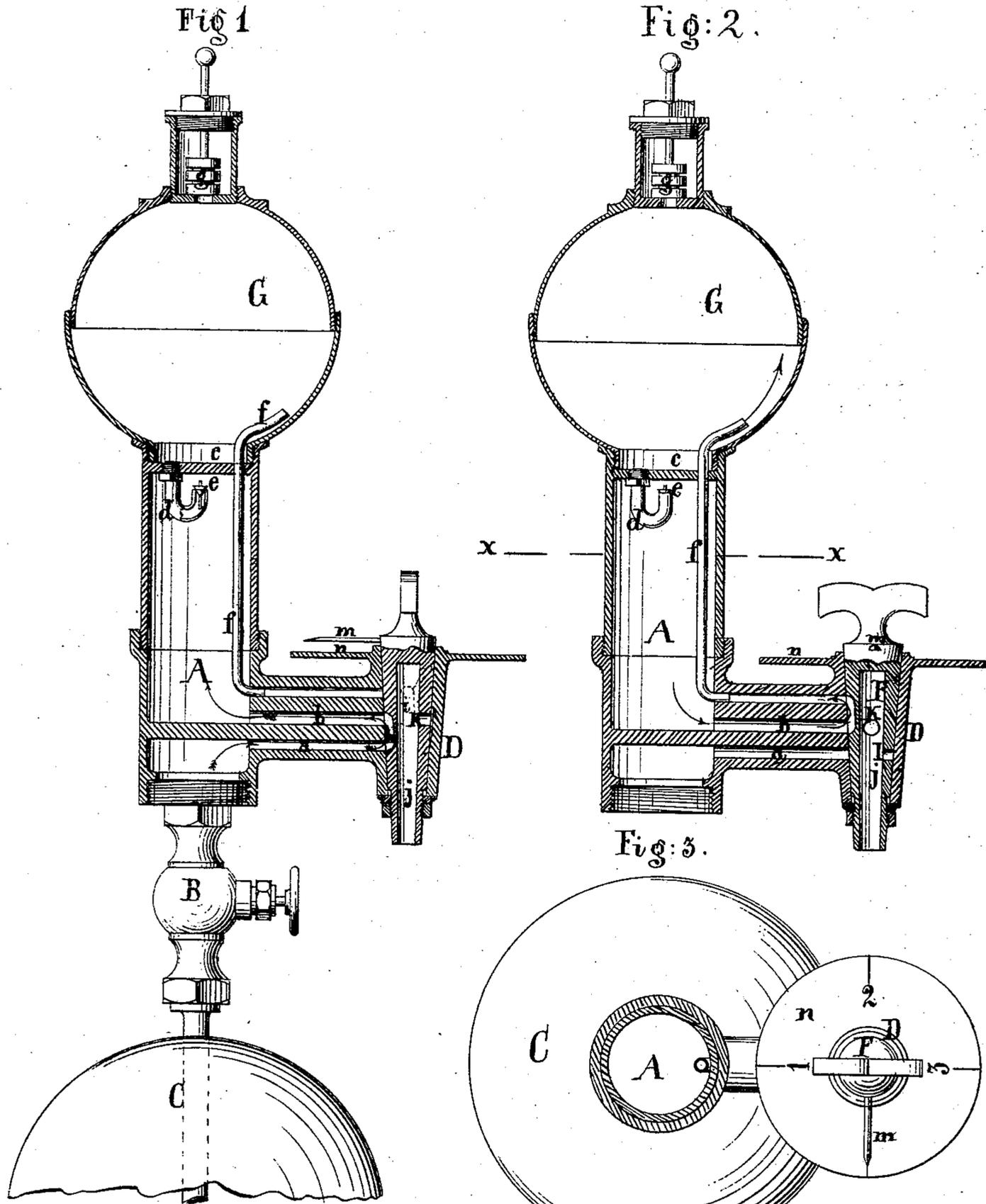


F. W. WIESEBROCK.

Apparatus for Drawing Effervescent Liquids.

No. 155,132.

Patented Sept. 15, 1874.



Witnesses:
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UNITED STATES PATENT OFFICE.

FREDERICK W. WIESEBROCK, OF NEW YORK, N. Y.

IMPROVEMENT IN APPARATUS FOR DRAWING EFFERVESCENT LIQUIDS.

Specification forming part of Letters Patent No. **155,132**, dated September 15, 1874; application filed April 10, 1874.

CASE B.

To all whom it may concern:

Be it known that I, FREDERICK W. WIESEBROCK, of the city, county, and State of New York, have invented a new and Improved Apparatus for Drawing Effervescent Liquids; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a vertical central section of my apparatus when the communication is open between the fountain and the measuring-chamber. Fig. 2 is a similar section of the same when the communication is open between the measuring-chamber and the expansion-chamber. Fig. 3 is a horizontal section of the same in the plane *x x*, Fig. 2.

Similar letters indicate corresponding parts.

This invention consists in the combination of a three-way cock with a measuring-chamber, which communicates with a fountain or vessel containing an effervescent liquid, and with an expansion-chamber, in such a manner that by turning the plug of the three-way cock the liquid from the fountain is permitted to flow into the measuring-chamber, and by turning said plug in the second position the liquid contained in the measuring-chamber is allowed to pass into the expansion-chamber, whence the surplus gas is permitted to escape, and finally, by turning the plug in the third position the liquid from the two chambers is free to escape into the tumbler or receiving-vessel. A fourth opening in the plug allows of drawing liquid directly from the fountain into the tumbler or receiving-vessel. The various positions of the plug are determined by an index and dial-plate.

In the drawing, the letter A designates my measuring-chamber, which communicates by channels *a b* and stop-cock B, with a fountain or vessel, C, containing effervescent liquid. The channels *a b* open into a shell, D, into which is fitted the plug F, which, together with said shell, forms a three-way cock. The measuring-chamber A is separated from the expansion-chamber G by a partition, *e*, and

these two chambers communicate with each other by a curved pipe, *d*, which is closed by a gravitating-valve, *e*. From the expansion-chamber extends a pipe, *f*, into the shell D of the three-way cock. The expansion-chamber is furnished with a safety-valve, *g*, which serves to allow the surplus gas to escape, and which is adjusted to the desired pressure by weights, or by a spring. The plug F of the stop-cock is provided with a cavity, *h*, which serves to connect the channels *a b*, (see Fig. 1,) and with a second cavity, *i*, which serves to connect the channel *b* with the pipe *f*, (see Fig. 2.) These two cavities do not communicate with the interior space or bore *j* of the plug F, but from this bore extends a lateral opening, *k*, which, when the plug is turned in the proper position, corresponds with the channel *b*. Besides these cavities and the opening *k*, I have provided the plug F with an additional lateral opening, *l*, which can be made to communicate with the channel *a*. From the body of the plug F projects an index, *m*, which, when the plug is turned, traverses over a circular dial, *n*, which is firmly secured to the shell D. On this dial are marked the figures 1, 2, 3, and 4, as shown in Fig. 3, and if the index points to figure 1, the liquid from the fountain or vessel C passes through the channels *a b* and cavity *h* into the measuring-chamber, the capacity of which is equal to the quantity of liquid to be drawn in a tumbler or other vessel. When the measuring-chamber has been filled the plug F is turned so that the cavity *i* covers the channel *b* and pipe *f*, and the liquid from the measuring-chamber passes through channel *b*, cavity *i*, and pipe *f*, into the expansion-chamber, and as the gas contained in the liquid is thereby permitted to expand, the liquid is relieved of its surplus pressure. If the pressure of the gas in the expansion-chamber rises above a certain limit the safety-valve opens, and the surplus gas escapes. After the liquid has been relieved of its surplus pressure the plug F is turned so as to bring the opening *k* opposite the channel *b*, allowing the liquid from the expansion-chamber, and that which may yet be contained in the measuring-chamber, to es-

caps into a tumbler or receiving-vessel placed beneath the plug F. In this case the liquid contained in the expansion-chamber passes down through the pipe *d* and valve *e*, the latter being opened by the pressure of the liquid.

If it should be desirable to impart additional life to the liquid in the tumbler, the plug F is turned so as to bring the opening *l* opposite the channel *a*, when the liquid from the fountain or vessel C is free to pass directly into the tumbler or receiving-vessel.

By this apparatus I am enabled to draw effervescent liquids, such as carbonic-acid water, ale, white beer, or others, without danger of spilling any liquid, and without producing any undue foam in the tumbler or receiving-vessel, and at the same time the liquid is measured off in the required quantity.

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

1. The combination of a three-way cock, D F, with a measuring-chamber, A, channels *a b f*, and expansion-chamber G, and a fountain or vessel containing effervescent liquid, substantially in the manner herein shown and described.

2. The additional channel *l* in the plug of the three-way cock D F, in combination with the measuring-chamber A, channels *a b f*, expansion-chamber G, and with a fountain or vessel containing effervescent liquid, substantially in the manner set forth.

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Witnesses:

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