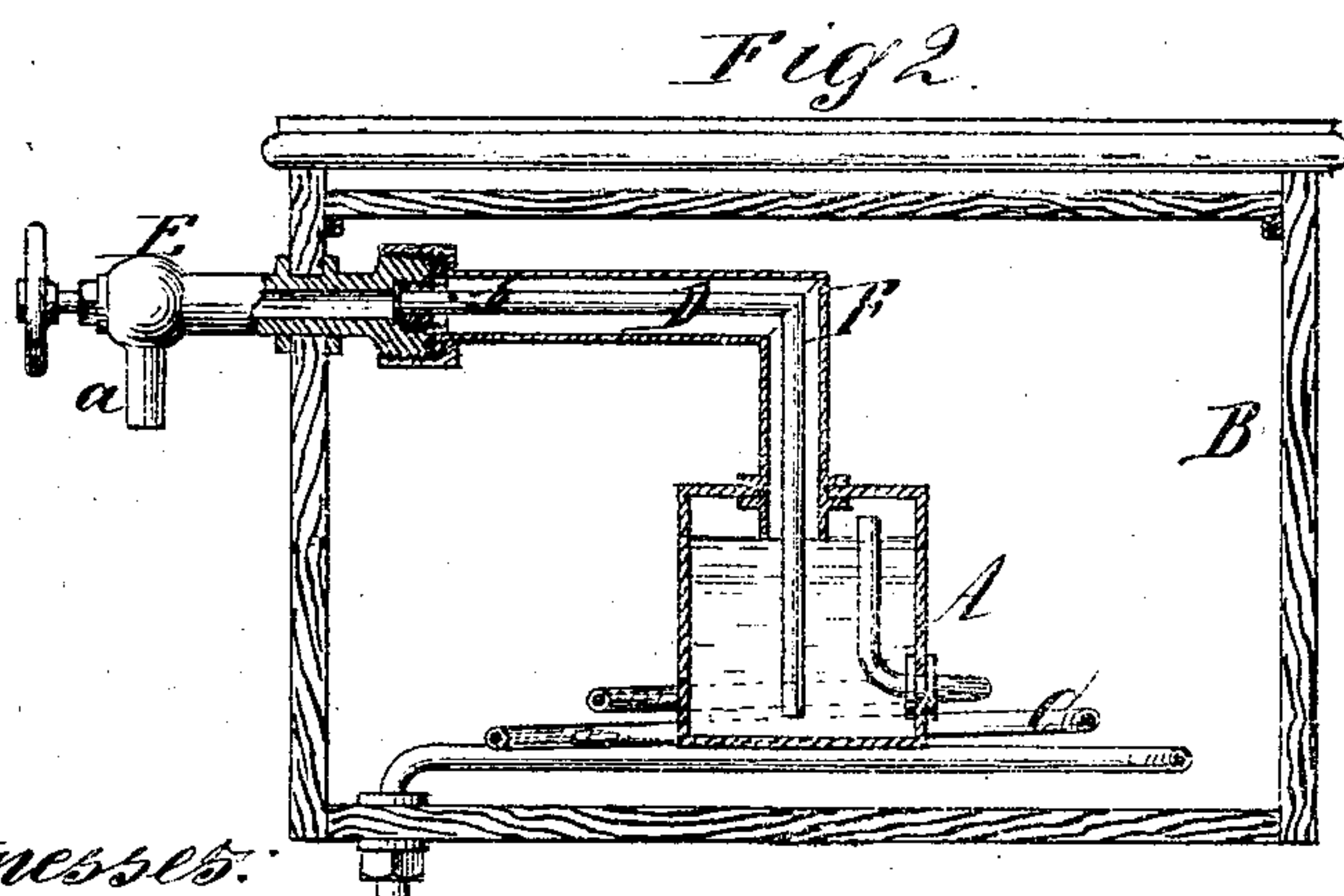
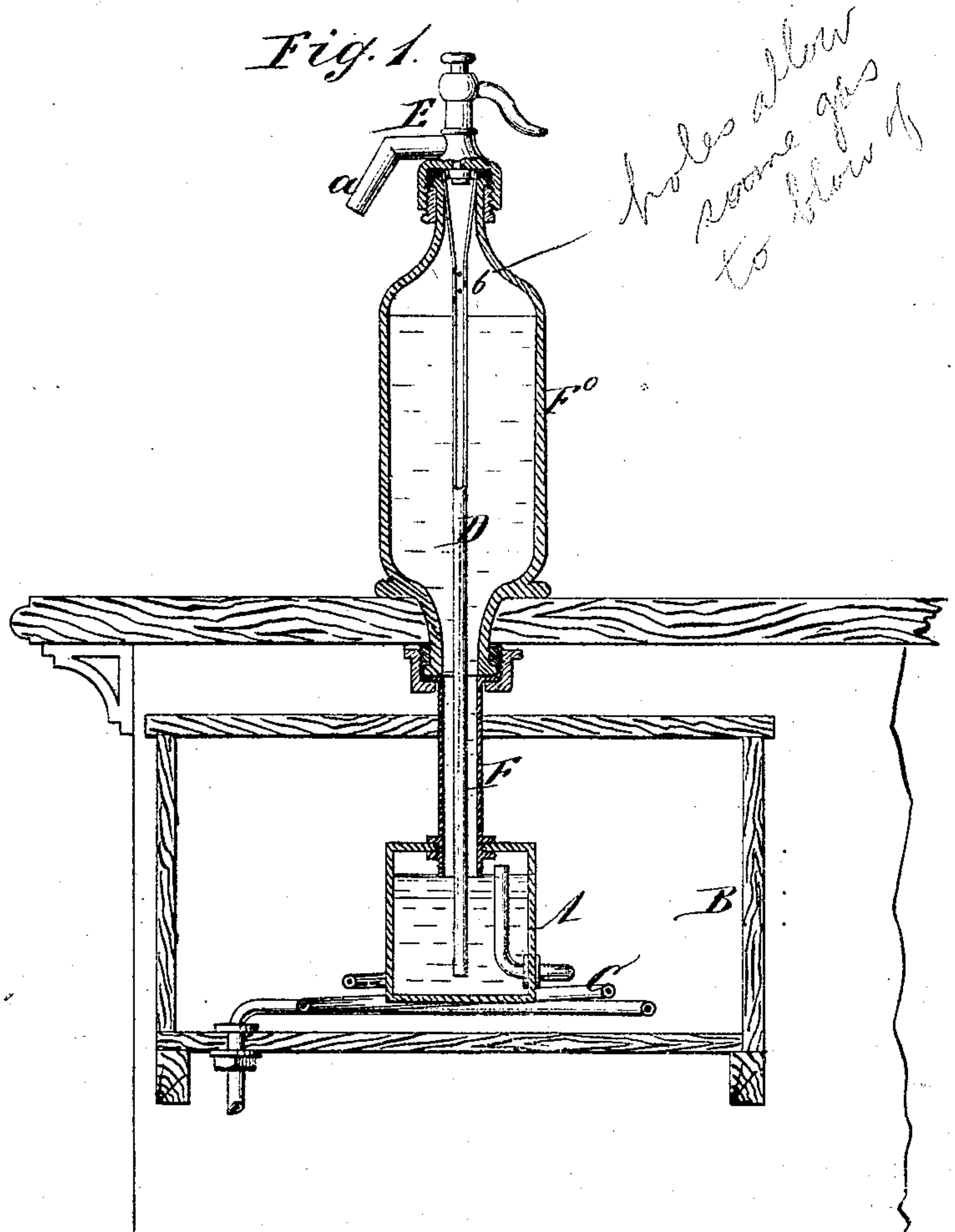


T. WARKER.

Apparatus for Dispensing Effervescent Liquids.

No. 147,205.

Patented Feb. 3, 1874.



Witnesses:
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UNITED STATES PATENT OFFICE.

THOMAS WARKER, OF NEW YORK, N. Y.

IMPROVEMENT IN APPARATUS FOR DISPENSING EFFERVESCENT LIQUIDS.

Specification forming part of Letters Patent No. **147,205**, dated February 3, 1874; application filed November 24, 1873.

To all whom it may concern:

Be it known that I, THOMAS WARKER, of the city, county, and State of New York, have invented a new and Improved Apparatus for Dispensing 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 section of this invention. Fig. 2 is a similar section of a modification thereof.

Similar letters indicate corresponding parts.

This invention consists in combining, with the pipe which leads from the cooler of an apparatus for dispensing effervescent liquids to the discharge cock or spout, a tube which surrounds said discharge-pipe in such a manner that a space is formed, which retains the surplus gas, and prevents the same from rushing with the liquid out through the discharge-spout, and thereby the disagreeable "sputtering" of the liquid is avoided. In the discharge-pipe, at a point near to its joint with the stop-cock or valve-chamber, are small openings, to allow the surplus gas to discharge slowly with the liquid, so as to prevent an overcharge of gas.

In the drawing, the letter A designates the cooler of an apparatus for dispensing effervescent liquids. This cooler is placed in an ice-box, B, and it communicates with the fountain containing the liquid by means of a coil, C, that circulates in the ice-box, and the inner end of which rises up in the cooler near to its top. From the cooler extends a pipe, D, to the discharge valve or cock E. This pipe reaches down near to the bottom of the cooler, and it is surrounded by a tube, F, which may be of uniform diameter throughout, as shown in Fig. 2, or which may be provided with an enlargement, F^o, as shown in Fig. 1. The outer end of the pipe D is pressed firmly against the end of the casting which contains the stop-valve and the discharge-spout *a*.

When the communication between the fountain and the cooler is opened, the liquid fills

the cooler and the space between the tube F and discharge-pipe D; but the gas which evolves from said liquid, and which rises in the cooler and the tube F, depresses the liquid in these parts, as indicated in the drawing. If the stop-valve is opened, the solid liquid from the bottom part of the cooler discharges, the gas being prevented from disturbing the steady flow; but in some cases it happens that the gas accumulates in the tube F, and cooler A to such an extent that the liquid in the cooler is depressed below the level of the mouth of the discharge-pipe, and in this case, on opening the stop-valve, gas will rush out with the liquid, and a disagreeable sputtering is the result. This difficulty I have overcome by making small holes *b* in the discharge-pipe at a point near its junction with the valve-casting, so that when the valve is opened a portion of the gas which has accumulated in the tube F is permitted to blow off slowly with the liquid, and thereby an overcharge of gas is prevented.

This improvement is applicable to the ordinary stop-cock of an apparatus for dispensing effervescent liquids, as shown in Fig. 2, or it can be used in connection with a vessel, F^o, which forms a continuation of the tube F, and which may be fastened in a counter or table, as shown in Fig. 1. In either case the tube F prevents the liquid from sputtering in its discharge.

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

1. The tube F, surrounding the pipe which leads from the cooler of an apparatus for dispensing effervescent liquids to the discharge-valve, said parts being arranged, in relation to each other, substantially in the manner herein shown and described.

2. The arrangement of holes *b* in the discharge-pipe D, when this pipe is surrounded by a tube, F, and combined with a discharge-valve, E, and cooler A, substantially as set forth.

THOMAS WARKER.

Witnesses:

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