

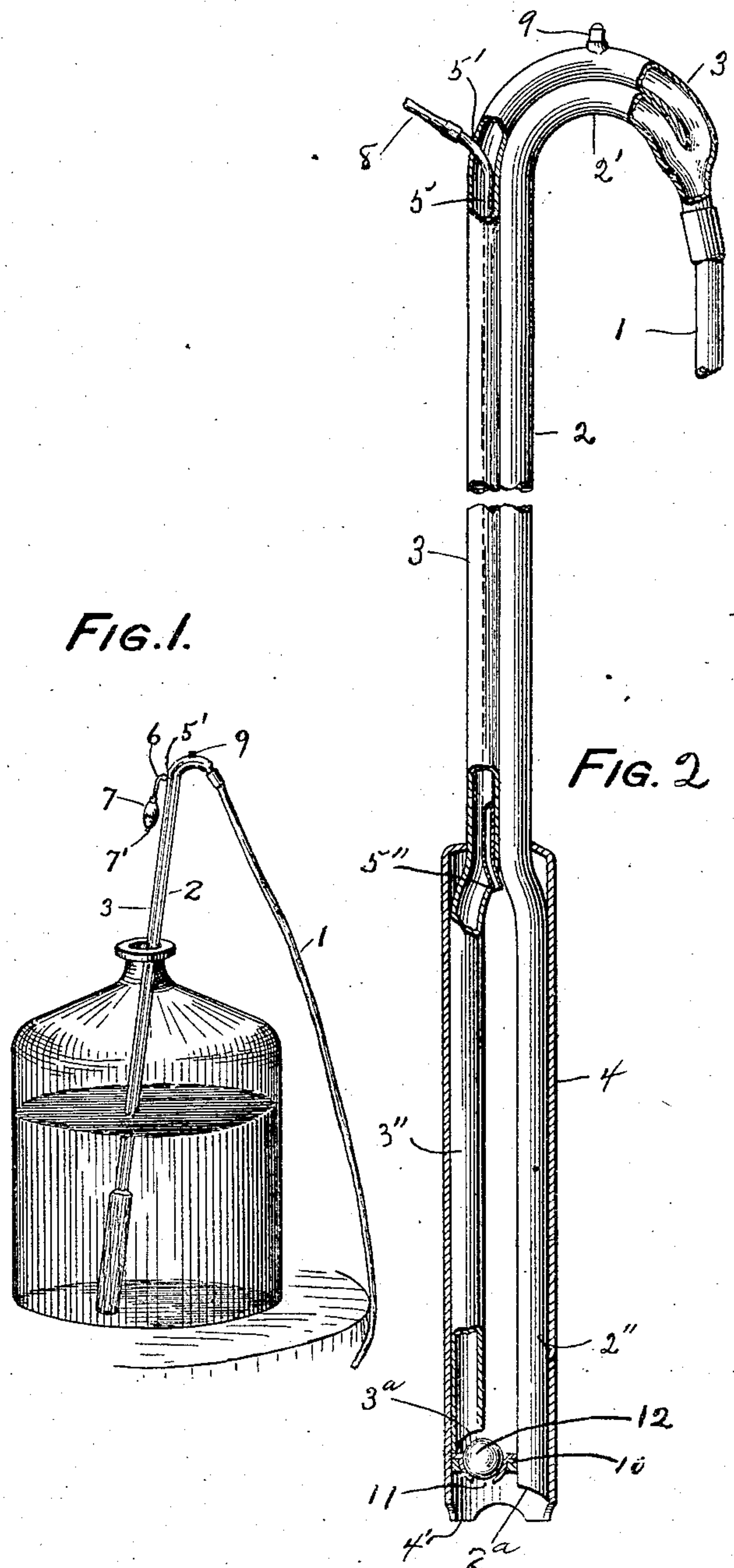
F. A. DECKER.

SIPHON.

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944,602.

Patented Dec. 28, 1909.



WITNESSES:

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SIPHON.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK A. DECKER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain Improvements in Siphons, of which the following is a specification.

This invention is a siphon with means for starting and discontinuing the siphonic action and for obtaining flow in either direction. It is particularly useful and convenient for filling and emptying battery cells, charging and emptying vessels containing chemicals, handling liquors as in filling bottles from casks, and the general application of a siphon.

In the accompanying drawings, Figure 1 is an elevation of my improved siphon inserted in a carboy, and Fig. 2 is a sectional elevation of the siphon on an enlarged scale.

As shown in the drawings, the siphon comprises the branch 1 connected with the two branches 2 and 3 below the bent upper portions 2' and 3' thereof. A chamber or receptacle 4, having the feet 4', incloses the lower ends 2'' and 3'' of the branches 2 and 3. A blow pipe 5 is disposed within the branch 3, the blow pipe extending from an inlet 5' near the top of the branch to an outlet 5'' in the top of the chamber 4. Air may be forced into the chamber through the blow pipe by connecting with the inlet 5' a rubber tube 6 and a bulb 7 with a valve 7', of well known form, as shown in Fig. 1, or by a mouth piece 8, as shown in Fig. 2.

At the top of the branch 3 is a normally closed valve 9 which can be operated manually for admitting air and stopping the siphon.

The inlets 2^a and 3^a to the lower ends of

the branches 2 and 3 are separated by a diaphragm 10 having a port 11 normally closed by the ball valve 12, the ball being limited in its upward movement by the lower end of the branch 3.

To operate the apparatus, with the lower end of the chamber immersed in a fluid, upon forcing air through the blow pipe, liquid, which has flowed into the chamber through the port by lifting the normally seated valve 12, is forced through the branches 3 and 1, inducing a flow that is continued until the discharging liquid is exhausted or the normally closed valve 9 at the top of the siphon is opened. A vessel emptied in the manner described may be refilled without removing the siphon therefrom by forcing or pouring liquid in the reverse direction by way of the branch 1 through the branch 2.

Having described my invention I claim:

1. A siphon having a pair of branches, a chamber having a partition and a valve disposed between the inlets to said branches, and means for communicating pressure to the contents of said chamber.

2. A siphon comprising a pair of branches connected with a third branch, a chamber communicating with an inlet to one of said pair of branches, a valve between said inlet and an opening in the other of said pair of branches, and means for communicating pressure to the contents of said chamber.

In testimony whereof I have hereunto set my name this 28th of February, 1906.

FRANK A. DECKER.

Witnesses:

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