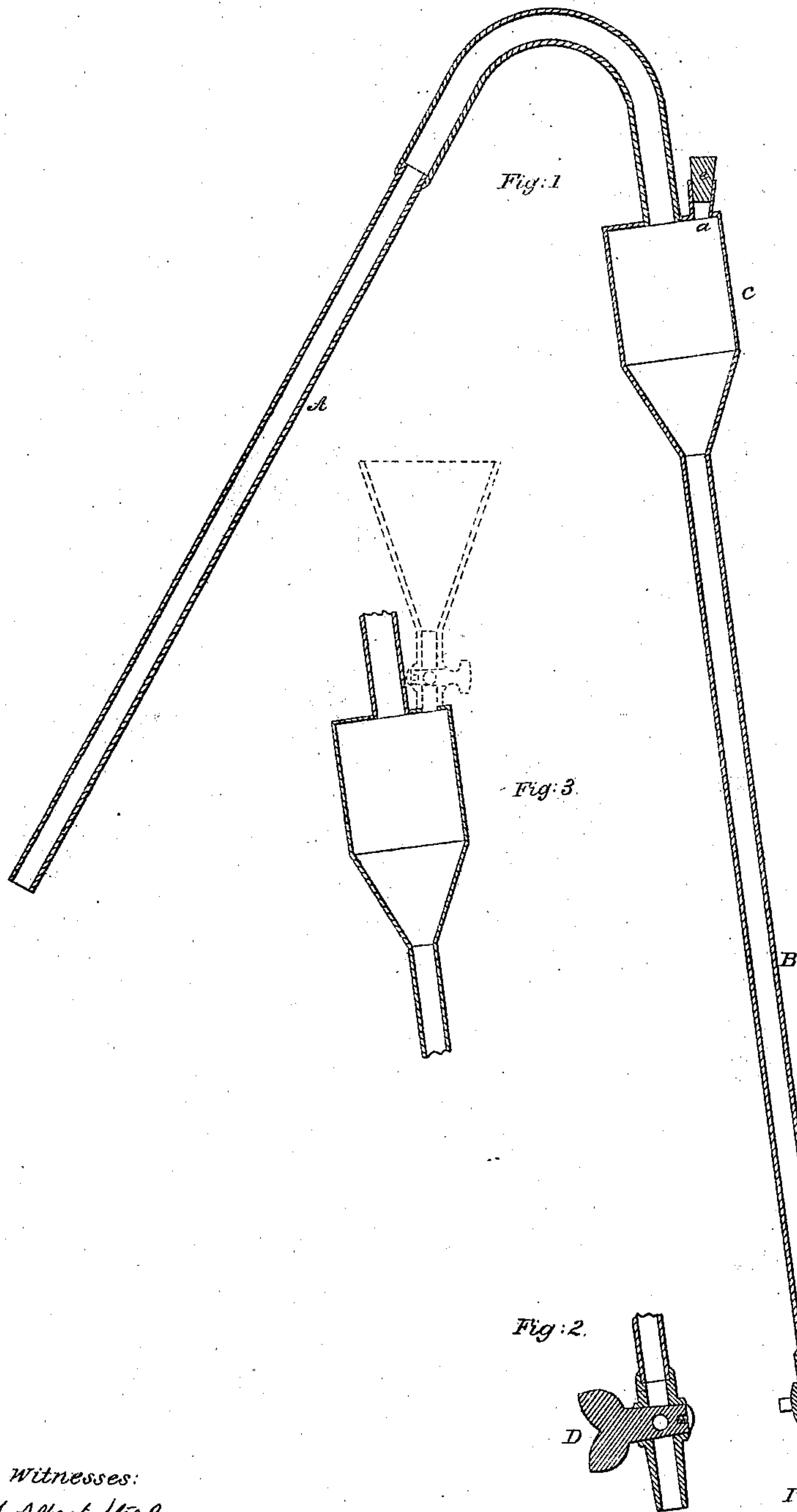


*J. M. Naglee,
Sinhon,*

N^o 42,304,

Patented Apr. 12, 1864.



*Witnesses:
H. Albert Steel.
Charles Howson*

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UNITED STATES PATENT OFFICE.

JOSEPH M. NAGLEE, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN SIPHONS.

Specification forming part of Letters Patent No. 42,304, dated April 12, 1864.

To all whom it may concern:

Be it known that I, JOS. M. NAGLEE, of Philadelphia, Pennsylvania, have invented an Improvement in Siphons; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists of a siphon having a reservoir with an opening below the bend and in the long leg, and a cock or valve at or near the lower end of the same leg, all substantially as and for the purpose described hereinafter.

In order to enable others to make and use my invention, I will now proceed to describe its construction and operation.

On reference to the accompanying drawings, which form a part of this specification, Figure 1 is a vertical section of my improved siphon; Figs. 2 and 3, detached sectional views of part of the same.

The short stem A of my improved siphon is bent at the upper end and so connected to the top of a reservoir, C, as to communicate therewith, and from the bottom of this reservoir projects the long stem B, the latter having a cock, D, at its lower end for a purpose described hereinafter. In the top of the reservoir C is an opening, *a*, in which fits a cork or plug, *e*.

The usual method of filling a siphon with fluid, preparatory to putting the same in operation, is to apply the mouth to the lower end of the longer stem, or to a tube communicating with that stem, and by causing a partial vacuum compel the fluid into which the short stem is inserted to fill the siphon. Where this method is inadmissible, as when acids or other corrosive or deleterious fluids are to be discharged by the siphon, the desired partial vacuum is caused by means of an exhausting-syringe. Siphons in which the latter method is practiced are expensive, while the former plan is exceedingly inconvenient, and can only be used in siphons of small dimensions.

In using my improved siphon the cock D is in the first instance so turned as to close the long stem, and the plug *e* is removed. The

stem A is then inserted into the fluid to be discharged, and a sufficient quantity of the latter is introduced through the opening *a* to fill the stem B and reservoir C. The plug *e* is then replaced and the cock D turned, so that the fluid may flow from the long stem B into any suitable vessel.

It will be apparent that before the fluid first placed in the reservoir C is exhausted a partial vacuum must be caused in the short stem, through which the fluid will pass into the reservoir, and thence through the long stem, and this passage of the fluid will be continued as long as the stem A is immersed in the supply of the fluid and as long as the cock D remains open. When the siphon has to be laid aside for future use, the cock D is closed and the stem A withdrawn from the supply of fluid, the stem B and reservoir C remaining filled. The siphon is then deposited in such a position that the fluid shall remain in the reservoir, so that when the siphon is again required for use the replenishing of the reservoir and stem B will be unnecessary.

Instead of a simple opening and a plug, *a*, a stop-cock with a funnel, as shown by red lines, Fig. 3, may be combined with the reservoir.

I am aware that siphons have been formed with bulbous and other air-chambers at or near the bend thereof, and that pistons have been applied to siphons in this locality. These devices I do not claim; but

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

A siphon having a reservoir, C, with an opening, *a*, below the bend and in the long leg, and a cock or valve, D, at or near the lower end of the same leg, all substantially as and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH M. NAGLEE.

Witnesses:

HENRY HOWSON,
CHARLES HOWSON.