

No. 632,521.

Patented Sept. 5, 1899.

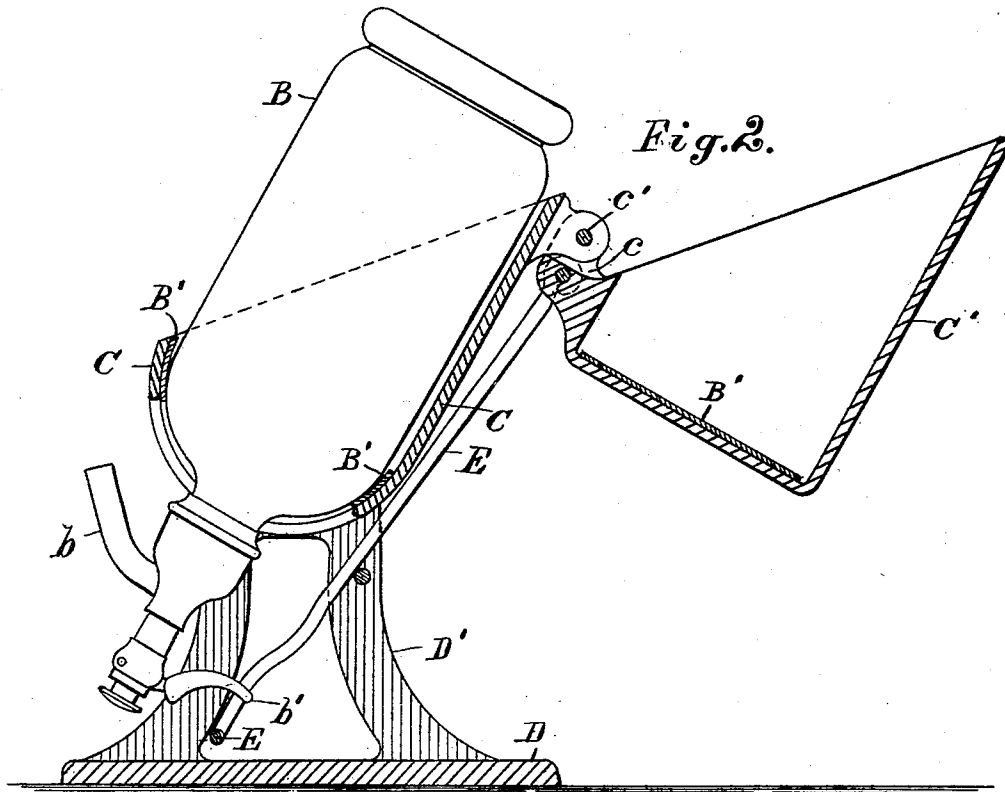
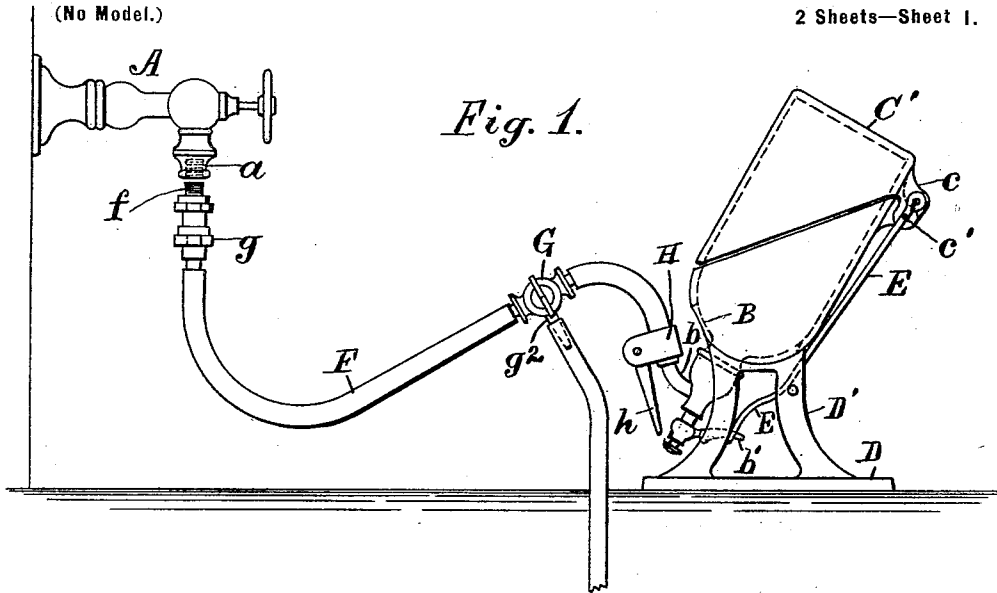
J. H. FOX.

SIPHON FILLING APPARATUS.

(Application filed Sept. 19, 1898.)

(No Model.)

2 Sheets—Sheet 1.



Attest:
L. Lee,
Edw. C. Hinsey.

Inventor.
John H. Fox, per
Thomas S. Crane, Atty.

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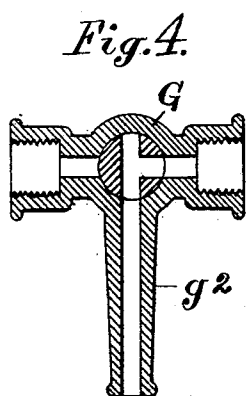
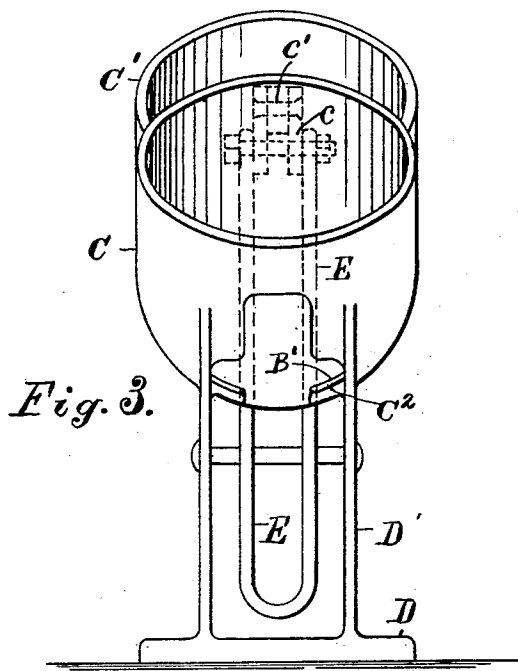
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(No Model.)

2 Sheets—Sheet 2.



Attest:
L. Lee
Edw. F. Kinsey.

Inventor.
John H. Fox, per
Thomas S. Crane, Atty.

UNITED STATES PATENT OFFICE.

JOHN H. FOX, OF NEW YORK, N. Y.

SIPHON-FILLING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 632,521, dated September 5, 1899.

Application filed September 19, 1898. Serial No. 691,307. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. FOX, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Siphon-Filling Apparatus, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

The object of the present invention is to furnish a simple and effective apparatus for charging "mineral-water siphons" directly from the draft-cock of a soda-water fountain and to thus enable those who have a soda-water fountain to deliver the soda-water or mineral water to the consumer at a distance from the fountain.

The invention comprises certain means for automatically opening the siphon stop-valve after the siphon is placed in a suitable holder and for automatically closing the stop-valve after the siphon is filled and before it is removed from the holder.

The invention will be understood by reference to the annexed drawings, in which—

Figure 1 is a side elevation of the entire apparatus. Fig. 2 is a vertical section of the siphon-holder opened, and Fig. 3 is a front elevation of the holder opened with the siphon removed. Fig. 4 is a longitudinal section of the three-way cock. Fig. 1 is upon a smaller scale than the other figures.

A designates the draft-cock of the soda-fountain, having a thread *a* formed within its nozzle.

B is the siphon-bottle, and *b* its nozzle.

The siphon-holder consists of a casing fitted to the siphon-bottle and formed with a socket-shaped lower part C, fitted to the upper part of the siphon and having foot-plate D and comprising also an upper part or cover C', hinged to the lower part by lugs *c* and pivot *c'*. The cover is fitted to embrace the bottom of the siphon and is divided from the socket C by a very oblique joint to facilitate the swinging of the cover from off of the siphon-bottom when removing the siphon. The foot-plate is connected with the holder by feet D', between which the bottom C² of the holder is cut away, as shown in Figs. 2 and 3, to admit the passage of the stop-valve case upon the head of the siphon. A yoke E is pivoted

upon the lugs *c* above the pivot *c'* and is formed with a loop which embraces the handle *b'* of the siphon stop-valve when the siphon is placed in the holder, as shown in Fig. 2.

When the cover C' is open, as shown in Fig. 2, the loop is moved downwardly and entirely clears the handle *b'*; but when the cover is closed, as in Fig. 1, the loop is pulled upwardly, thus opening the siphon stop-valve, while the loop is locked in such position by the movement of its upper hinge above the pivot *c'*, as shown in Fig. 1.

The holder is made of cast metal of suitable strength to retain the fragments of the siphon should the latter be accidentally exploded by the pressure of the gas, and the cover thus serves the double function of confining the siphon within the holder and opening the valve through the yoke E. The holder has a soft lining B' to protect the siphon.

The connection from the draft-cock A to the siphon-nozzle *b* consists of the hose F, having the coupling-nipple *f* adapted to fit within the thread *a* and connected with the hose by the union *g*. The hose is provided with the three-way cock G and with the clamp H, which embraces the end of the hose and pinches it about the periphery of the nozzle *b* by means of a hand-lever *h*. The three-way cock has a branch *g*² at one side connected with a drip-pipe *g*³, which may be led to a sink when the apparatus is in use.

The threaded nipple *f* is shown disconnected from the draft-cock A in Fig. 1 to show its construction clearly; but when connected therewith and the hose coupled to the siphon-nozzle by the clamp H the siphon may be readily filled by first turning the three-way cock, as shown in Fig. 4, which connects the interior of the siphon with the drip-pipe *g*³, thus venting the siphon and blowing out its stale contents. The three-way cock is then turned to connect with the fountain, which fills the siphon until the pressure of its gaseous contents is equal to that in the soda-fountain, when the three-way cock may then be turned again, as shown in Fig. 4, to vent a part of such gas and permit the filling of the siphon to the desired point. The final turning of the three-way cock, as shown in Fig. 4, shuts off the siphon from the fountain, and the siphon stop-valve is then closed by

turning the cover C', as shown in Fig. 2. The contents of the siphon being thus secured, the clamp H may be removed from the nozzle *b* and the siphon taken from the holder completely charged. The clamp H is operated with such facility that the connection of the siphon with the fountain and the filling of the siphon occupies but a few seconds of time, and the filling of the siphon may thus be effected by any one who possesses a soda-water fountain.

I am aware that various forms of apparatus have been devised for filling siphons and claim, therefore, only my own improvements.

Having thus set forth the nature of the invention, what I claim herein is—

1. In a siphon-filling apparatus, the combination, with the holder for sustaining the siphon in an inverted position, of the cover hinged upon the holder and adapted to retain the siphon in the holder, and provided with a yoke fitted to the handle *b'* of the siphon stop-valve, and connections between the cover and yoke to open the valve upon the closing of the cover, substantially as herein set forth.

2. In a siphon-filling apparatus, a holder comprising the socket C having an opening in the bottom to pass the siphon-nozzle and

stop-valve handle, a foot-plate to support such socket, with a hinge-lug upon one side of the socket, as set forth, and the cover C' having lugs *c* pivoted upon the said hinge-lug and the yoke E extended in the path of the siphon-stop-valve handle *b'*, and hinged upon the lugs *c* so as to open the said stop-valve when the cover C' is closed, substantially as herein set forth.

3. In a siphon-filling apparatus, the combination, with the holder for the siphon-bottle, and a hose connected with a supply under pressure and having a clamp for connection with the siphon-nozzle, and a three-way cock adapted to ventilate the siphon or to introduce the liquid thereto, of means to automatically open the siphon stop-valve after it is placed in the holder, and means for automatically closing the stop-valve before the removal of the siphon from the holder, substantially as herein set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN H. FOX.

Witnesses:

EDWARD F. KINSEY,
THOMAS S. CRANE.