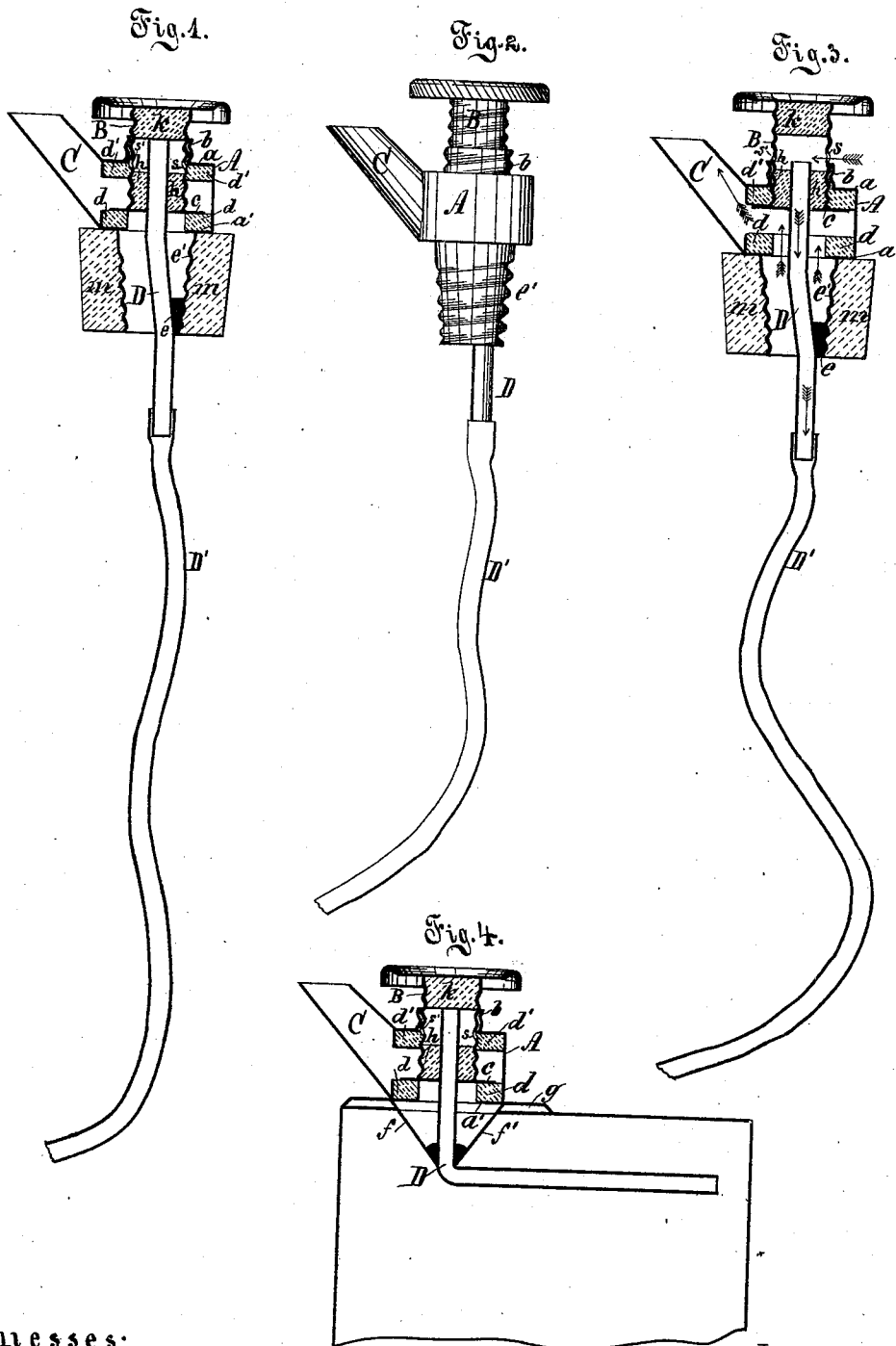


G. W. BANKER.
Vented Demijohn Faucet.

No. 196,285.

Patented Oct. 23, 1877.



Witnesses:

Theodore Porter

W. S. Fitch

Inventor:

Geo. W. Banker

UNITED STATES PATENT OFFICE.

GEORGE W. BANKER, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN VENTED DEMIJOHN-FAUCETS.

Specification forming part of Letters Patent No. **196,285**, dated October 23, 1877; application filed June 29, 1877.

To all whom it may concern:

Be it known that I, GEORGE W. BANKER, of the city of Brooklyn, county of Kings, State of New York, have invented a new and useful Vented Demijohn-Faucet, of which the following is a specification, reference being had to the accompanying drawings, forming part of the same.

Figure 1 is a longitudinal central section of a vented faucet containing my improvement, showing the faucet closed, and the faucet provided with a screw-shank for insertion in a cork. Fig. 2 is an external side view of the same. Fig. 3 is a view similar to Fig. 1, showing the faucet open; and Fig. 4 is a similar view of the vented faucet soldered to a metal can, a suitable attachment for soldering to the can being provided and the screw-shank dispensed with.

My invention relates to a faucet for fluid-holding cans and demijohns; and consists in combining, with the faucet hereinafter described, a vent-tube arranged within the faucet, and extending within the can or demijohn, which is closed by the closing of the faucet, and opened for the admission of air by the opening of the faucet, as hereinafter described.

A is the body or barrel of the faucet, which is partially closed at both ends by perforated disks *a a'*. From the opening in the upper disk *a* rises a screw-threaded tube, *b*. B is a hollow screw-threaded plunger working in the said tube *b*, and extending down into the body of the faucet. To the lower end of this plunger is attached a disk, *c*, which constitutes the valve of the faucet. *d* is a cork, annular in form, placed in the body of the faucet, and resting upon the perforated disk *a'*, constituting the lower valve-seat, against which the valve *c* presses to close the faucet. *d'* is a similar annular cork placed in the upper part of the body A, forming an upper valve-seat, against which the valve *c* will press when the plunger is run up in opening the faucet. It is also made to fit snugly around the plunger, to prevent the escape of fluid between it and the plunger. C is the spout through which the fluid is discharged when the faucet is opened by running up the plunger. D is a metal vent-tube arranged within the faucet,

soldered or otherwise attached to the stationary part of the faucet, with its open upper end somewhat below the head of the plunger when the faucet is closed. In Fig. 1 it is soldered, at *e*, to the screw-shank *e'*. In Fig. 4 it is shown attached to brackets or arms *ff'*, which extend down from the disk *g*. Within the plunger, at its lower end, is fixed a packing, *h*, which may be a perforated cork, which fits snugly around the vent-tube D, so as to form with it a fluid-tight joint. In the upper end of the plunger is fixed a cap or valve, *k*, which is preferably elastic, and may be cork, proportioned and arranged to just fit down upon the open end of the tube D, when the plunger is run down to close the faucet, thereby closing also said tube. A small aperture, *s*, is made in the wall of the plunger, on the side opposite the spout C, for the admission of air into the tube D when the faucet is open; and *s'* is another small aperture, on the same side with the spout C, to permit the escape of any fluid that may flow back through the tube D, when the demijohn is decanted to pour from the spout. *e'* is a screw-shank attached to the disk *a'*, designed to be screwed into a perforated cork, *m*. The said cork may be first crowded tightly into the neck of a demijohn or a hole in a key or cask, and then the shank *e'*, which is preferably tapering, may be screwed into the cork, thereby tightening the latter in its place.

D' is a flexible tube secured to the lower end of the metal tube D, designed to be inserted into the demijohn or keg. It may be of rubber or any other suitable flexible material.

In using this tube reference must, of course, be had to the kind of fluid contained in the demijohn or keg. It can be used, only with such fluids as will not act to dissolve or otherwise destroy it. For oils the metal can is usually employed, and the faucet is soldered to the can, as shown in Fig. 4. When the flexible tube cannot be used the metal tube may be extended into the can, and bent to the side of it opposite the nozzle or spout of the faucet.

By this arrangement it is evident that, upon elevating the can to pour from the spout, the air will pass in through the tube D into the vacant space in the can. The open lower end of the flexible tube will, when the demijohn or

keg is decanted, float to the top of the fluid or the upper side of the decanted vessel, so as to insure the admission of air through it into the vessel.

When the corks *h* and *k* in the plunger are of a suitable size, and are properly inserted, they will hardly fail to stay in their places; but, to positively insure this result, a spiral spring may be placed between these corks, encircling the tube *D*, acting steadily to press the corks into their respective ends of the plunger. In place of cork for the packing *h* and cap *k*, any other suitable material may be used.

A faucet thus constructed carries within itself a very perfect automatic vent, or one which is necessarily opened and closed with the opening and closing of the faucet itself.

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

1. A spouted faucet in which are combined a hollow screw-threaded plunger, *B*, provided

with a vent-hole, *s*, the screw-threaded tube *b*, the valve *c d*, and the fixed vent-tube *D*, whereby the vent-tube is opened and closed with the opening and closing of the faucet, as described.

2. The combination, in the faucet described, of the fixed rigid tube *D*, the hollow screw-threaded plunger *B*, provided with the packing *h*, the vent-hole in *B*, and the flexible tube *D'*, all constructed to operate as and for the purpose described.

3. The combination, in a spouted faucet, of the vent-tube *D* and the screw-threaded plunger *B*, provided with the packing *h*, as and for the purpose described.

Witness my hand this 28th day of June, 1877.

GEO. W. BANKER.

Witnesses:

WM. T. FAENHAM,

M. F. CLIFTON.