

(No Model.)

L. S. HOYT.
FAUCET BOTTLE STOPPER.

No. 378,366.

Patented Feb. 21, 1888.

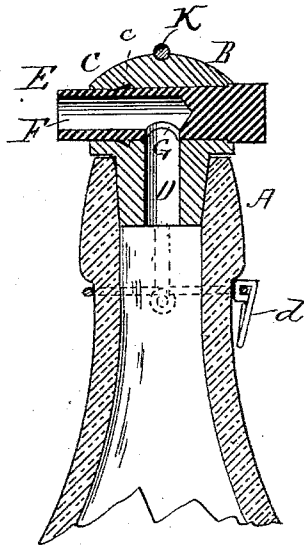


Fig. 1.

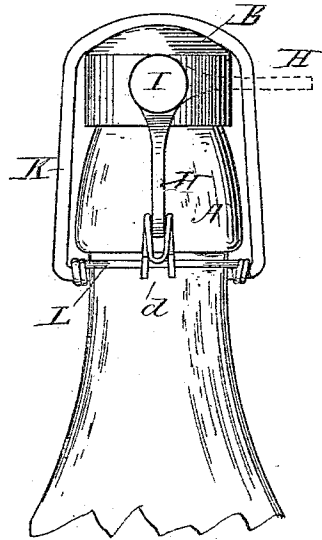


Fig. 2.

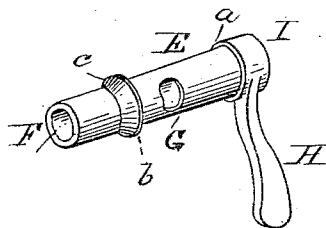


Fig. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

LEWIS S. HOYT, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE FAUCET BOTTLE COMPANY, OF NASHUA, NEW HAMPSHIRE.

FAUCET BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 378,366, dated February 21, 1888.

Application filed May 13, 1887. Serial No. 235,023. (No model.)

To all whom it may concern:

Be it known that I, LEWIS S. HOYT, a citizen of the United States, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Faucet Bottle-Stoppers, of which the following is a specification.

This invention relates to the combination, with a bottle-stopper made of some elastic and yielding material, of a close-fitting faucet extending transversely through the stopper and communicating with the interior of the bottle, whereby, without the removal of the stopper, the bottle can be filled and any portion of the contained liquid can be discharged at will; and the invention consists, first, in the combination, with the faucet, of devices, substantially as hereinafter more fully set forth, for retaining the faucet in its place in the stopper and preventing a transverse movement in the same; and, second, in the combination, with the faucet, of devices, substantially as hereinafter set forth, for holding the faucet in position after it has been closed.

The accompanying drawings represent my combined stopper and faucet, and in the drawings Figure 1 is a sectional view showing the faucet open. Fig. 2 is a view in elevation, and Fig. 3 is a detached view, of the faucet.

In the several figures the same letters indicate the same parts.

Referring to the drawings, A is the neck of the bottle.

B is the stopper. This is of the usual form and should be made of cork, vulcanized rubber, a compound of cork and rubber, or of any other suitable elastic and yielding material.

C is a perforation which extends through this stopper transversely, and D is another perforation which extends through the center of the stopper from the perforation C to the interior of the bottle. These perforations may be formed in the stopper after it is made, or, when the stopper is made of vulcanized india-rubber or of a compound of rubber and cork, may be formed in the process of molding or casting the stopper.

E is the faucet, which is inserted into the perforation C, extending through the stopper, and fits closely therein, owing to the elastic and

yielding nature of the material of which the stopper is made. It consists of a cylinder, preferably of metal, having in it a perforation or passage, F, which extends nearly through the cylinder, and provided with an opening, G, on the side into the passage F, which opening, when the faucet is in position, registers with the perforation D in the stopper. This cylinder is therefore similar to an ordinary one-way cock, and acts, when rotated, to open and close the passage D, communicating with the interior of the bottle. When this passage is opened, the liquid in the bottle can be discharged through the passage D and the faucet, and the bottle can be filled through the same passage.

The passage D can be opened and closed by moving the cylinder E longitudinally; but I prefer to operate the faucet by rotating it.

Any suitable device may be attached to the faucet E for operating it. A convenient device is the arm H, attached to the end of the cylinder E. When this arm is turned down, as shown in full lines in Fig. 2, the faucet is closed; but when turned up, as shown in dotted lines in Fig. 2, the faucet is open. The cylinder E may have two or more openings in its sides opposite to one another; but one will be found sufficient for the purpose.

In order to make the faucet air-tight and render its attachment to the stopper permanent, it is made to fit the perforation C closely, and is provided at one end with a head, I, having a shoulder, a, on the same, which bears against the stopper when the cylinder E is inserted and prevents its further movement, and near its other end with a flange, b, which has its face toward the end of the cylinder inclined, as shown in Figs. 1 and 3, at c, but has its other face vertical. This flange therefore acts like a barb upon an arrow or harpoon, and while it does not prevent the faucet from being pushed into the perforation, owing to the yielding and elastic nature of the material of which the stopper is made, keeps it firmly in position and prevents it from being withdrawn. The head should be made thick, so as to withstand the weight of the machine used for filling the bottle through the faucet. When the arm H is turned down and the faucet is closed, it is desirable to provide a device for

holding this arm in position. The bottle is provided with the usual bail, K, which passes over the stopper, and a convenient device for securing the arm H in position consists of a wire catch, *d*, fixed upon the neck-ring L, to which the bail K is attached. When this catch *d* is turned up, as shown in Fig. 2, it holds the arm H; but when turned down, as shown in Fig. 1, the arm is released.

This faucet bottle-stopper is particularly useful for bottles containing aerated or charged liquids.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. The combination, substantially as and for

the purpose set forth, with the elastic and yielding stopper B, of the faucet E, the flange *b* on the same, and the head I, having the shoulder *a* thereon. 20

2. The combination, substantially as and for the purpose set forth, of the stopper B, the faucet E, passing transversely through the same, the arm H, attached to the head of the faucet, the ring L, and the catch *d*. 25

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

LEWIS S. HOYT.

Witnesses:

ALEX. L. HAYES,
GEORGE G. HACKETT.