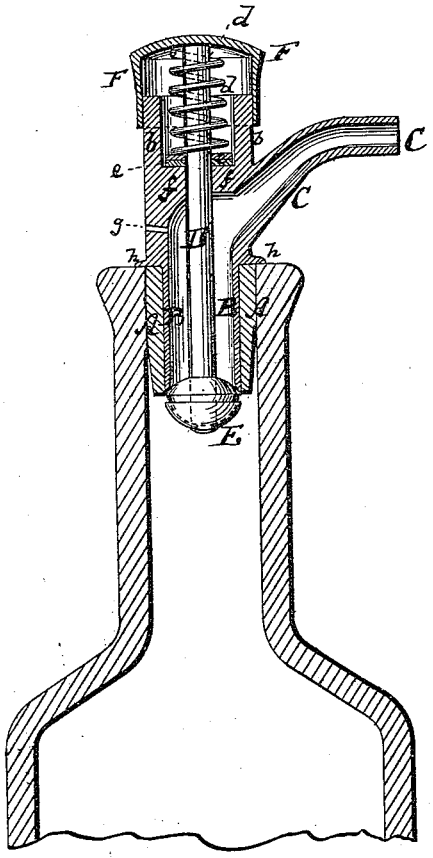
F. HAURY.

Bottle-Stopper.

No. 167,530. Patented Sept. 7, 1875.



Witnesses:

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UNITED STATES PATENT OFFICE.

FRANÇOIS HAURY, OF NEW YORK, N. Y.

IMPROVEMENT IN BOTTLE-STOPPERS.

Specification forming part of Letters Patent No. **167,530**, dated September 7, 1875; application filed July 2, 1875.

To all whom it may concern:

Be it known that I, FRANÇOIS HAURY, of New York city, in the county and State of New York, have invented a new and Improved Bottle-Stopper, of which the following is a specification:

The drawing represents a vertical central section of my improved bottle-stopper.

This invention relates to a new detachable cap and stopper for bottles, the cap being hollow and provided with an air-opening and with a projecting spout, so that it may serve as an outlet for the liquor confined in the bottle whenever a valve closing the lower end of the annular stopper is pressed down.

The invention is more particularly intended for use on bottles containing still liquids.

My invention consists in providing the cap having the spout with an air-opening to allow air to enter the bottle, while the liquid is poured out through the spout, the cap being used in combination with a vertically-movable valve closing the annular stopple.

In the accompanying drawing, the letter A represents a cork, of annular form, placed around a tube, B, which terminates at or near its upper end in a laterally and upwardly projecting spout, C, said tube B and spout C constituting, with their appurtenances, the cap that closes the opening in the stopple. D is a rod, which extends centrally through the tube B, and carries a valve, E, at its lower end, said valve closing against the open lower end of the tube B, as shown. The rod D extends through a proper opening in the top *f* of the tube B and into an upward tubular extension, *b*, of said tube B, where it is embraced by a spring, *d*, which serves to raise and hold the valve E against its seat on the lower end of the tube B. A washer, *e*, made of cork at its lower part and rubber at the upper part, or of cork entire, is placed around the rod D beneath the spring *d*, and in contact with the partition *f* that divides the body of the tube B from its upper extension *b*. This washer excludes the liquid from the upper tube *b*. The upper end of the rod D is securely fastened to a thimble-shaped thumb-piece, F, which embraces the upper part of the tube *b*, as shown.

By pressing upon the thumb-piece F the rod D is lowered, the spring *d* compressed, and the valve E opened, so that the liquid may be discharged through the tube C. As soon as the thumb-piece is released the valve is raised against its seat by the spring *d*.

In order to obtain a full stream of the liquid through the spout C, I have provided an air-opening, *g*, through the body of the tube B beneath the partition *f*, but above the upper end of the stopple A or the flange *h* that rests on the mouth of the bottle. Through this small aperture *g* the air necessary for replenishing the bottle while the liquid is poured out can enter the bottle, and thus it is made unnecessary that air should enter through the spout C while liquid is discharged through the same spout, and consequently a full stream is obtained through the spout.

The advantage of this stopper is, that it can be cheaply manufactured and applied to bottles for household use, preventing air or impurities from entering the contents of the bottle, and allowing the contents to be poured out in such quantities as may be desired without necessitating the removal of the stopper.

I claim—

The combination of the tube B, having the air-opening *g* and the tubular extension *b*, with the valve-rod D, valve E, spring *d*, and thumb-piece F, substantially as herein shown and described, the whole being adapted to use on an annular stopple, A, as specified.

FRANÇOIS HAURY.

Witnesses:

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