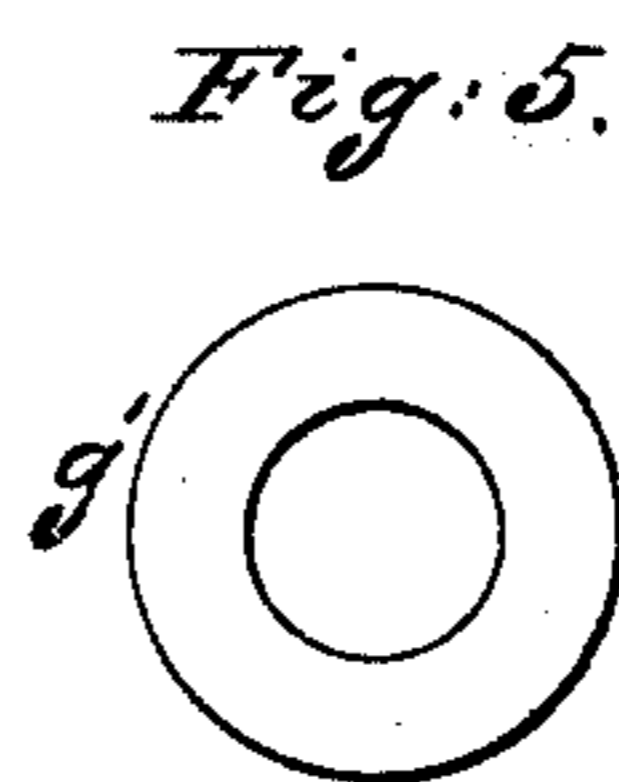
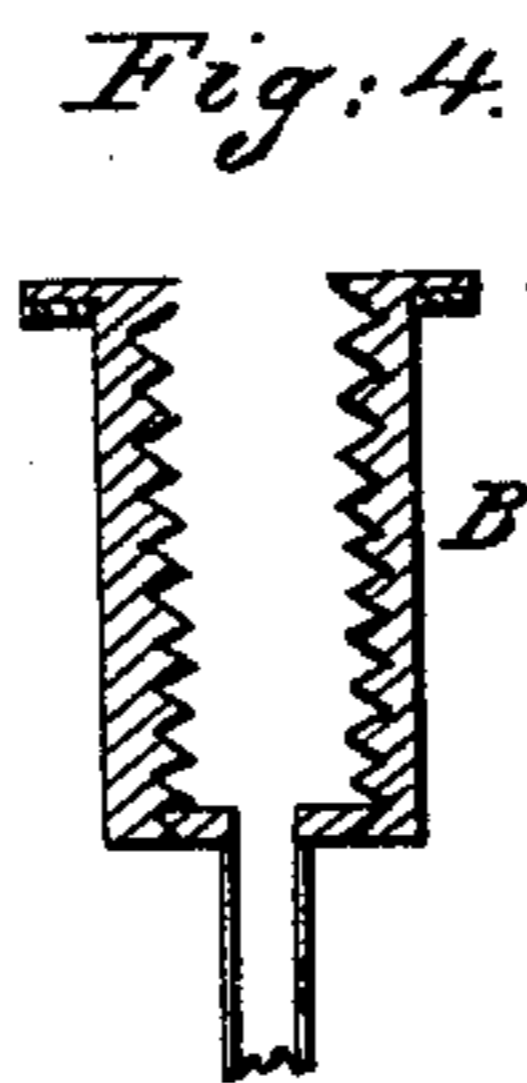
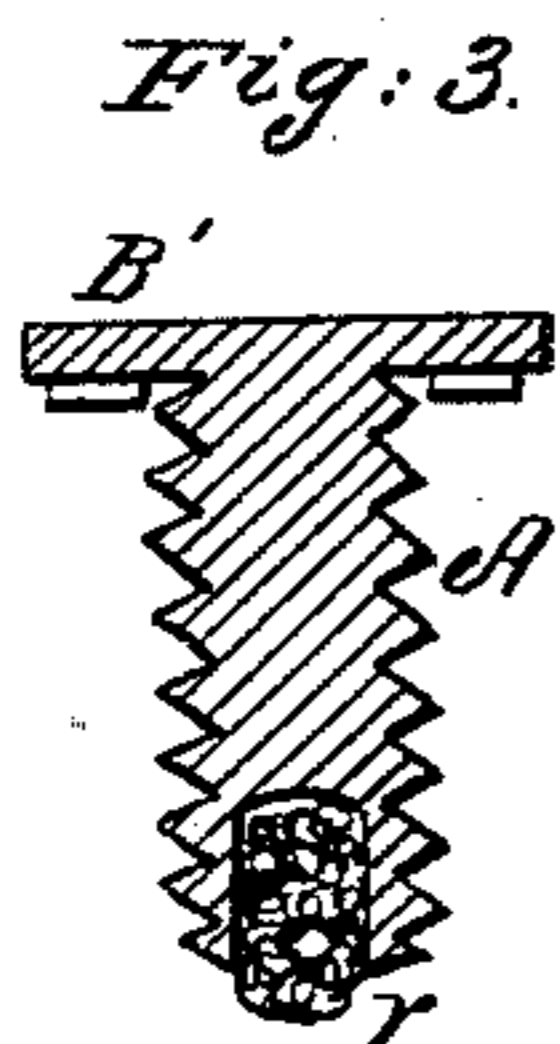
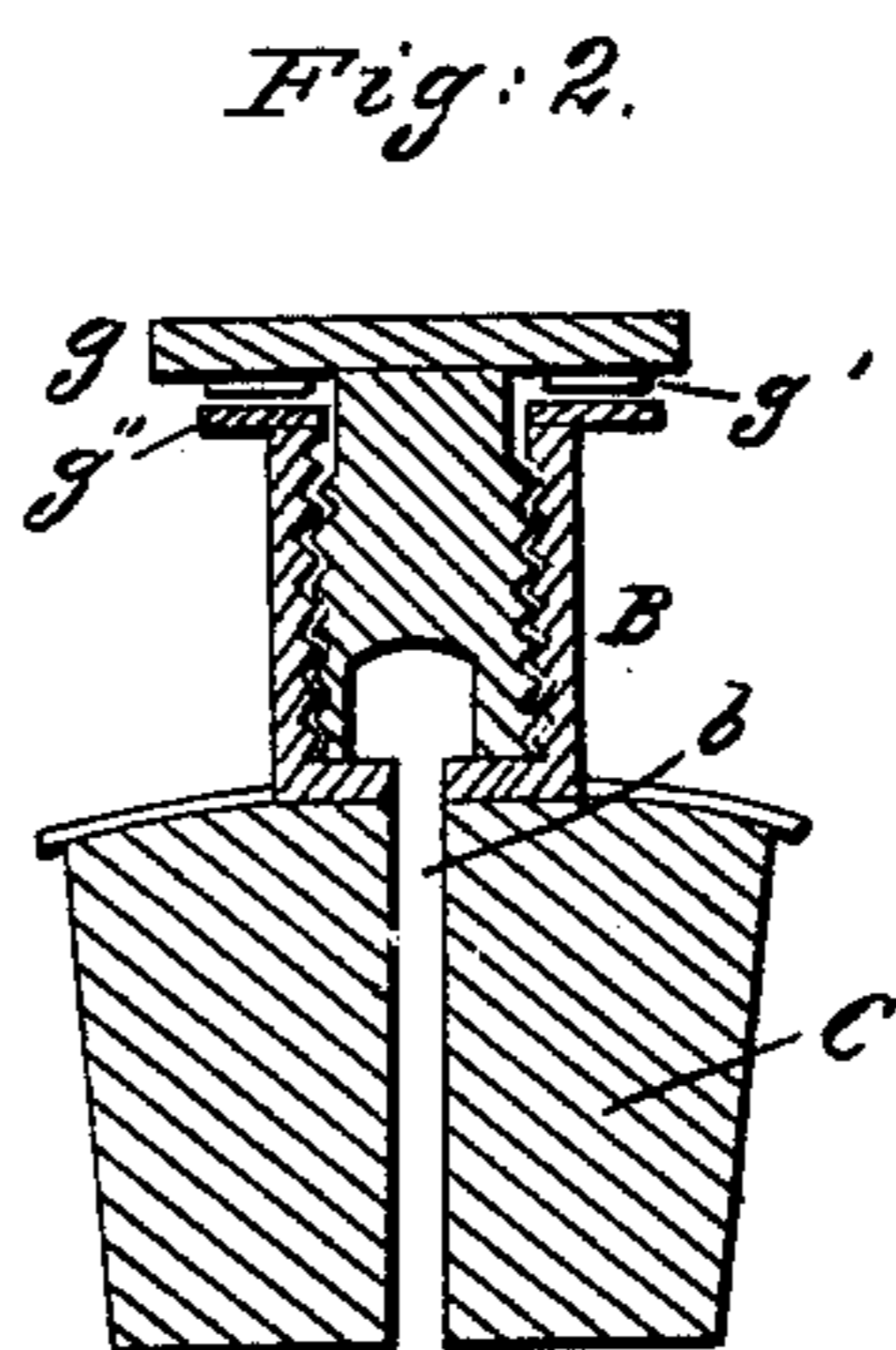
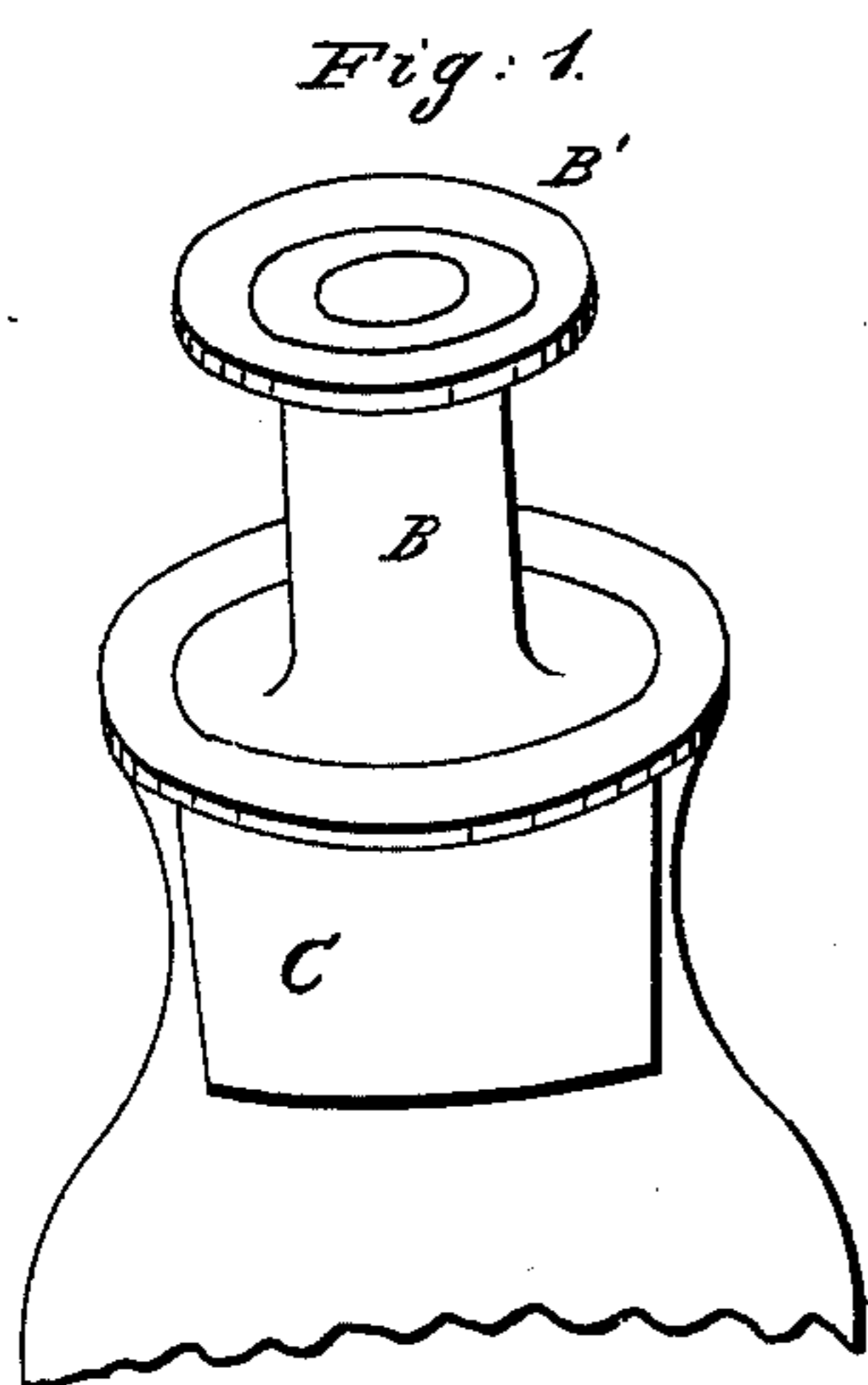


G. W. ROGERS.

Bottle Stopper.

No. 57,382.

Patented Aug. 21, 1866.



Witnesses:

Charles F. Rogers  
Theodore Plalkin.

Inventor:

George W. Rogers.  
Per L. D. Gale  
Atty.

# UNITED STATES PATENT OFFICE.

GEORGE W. ROGERS, OF NEW YORK, N. Y.

## IMPROVED BOTTLE-STOPPER.

Specification forming part of Letters Patent No. 57,382, dated August 21, 1866.

*To all whom it may concern:*

Be it known that I, GEORGE W. ROGERS, of the city, county, and State of New York, have invented certain new and useful Devices for the Closing of the Mouths of Bottles which have not been before used or known; and I hereby declare that the following is a full and sufficient description thereof, reference being had to the accompanying drawings and references marked thereon, making a part of this specification.

In the drawings, let Figure 1 represent an elevation of the bottle-fastening; Fig. 2, a sectional elevation of the fastening; Fig. 3, sectional elevation of the screw-plug or valve. Fig. 4 is a sectional view of the neck part of the bottle, showing the valves and valve-seats separately; Fig. 5, the valve *g*.

The nature of the invention consists in the adaptation of the valve-face *v* to fit against shoulders *c c*, so as effectually to cover the opening in *B*, while the lip-plate *g''* and the valve-piece *g'* serve, the former to pour small quantities from the bottle without danger of dripping upon the sides, while the latter, in combination with the valve *v*, insures tightness of the fastening, so that it is impossible for any portion of the aroma to escape through the valves.

To enable others skilled in the art to make and use my invention, I will proceed to describe it somewhat in detail.

There are a great variety of liquid or liquid and gaseous compositions which are adapted to daily use and require special devices to keep them from wasting by evaporation. Among these the most obvious is a well-fitted cork, a stop-cock, or a well-ground glass stopper. A screw-plug bearing against the side of a pipe is another mode for preventing the escape of liquid or gaseous matter.

In the present case, where liquids containing essential oils and other volatile liquids are used for imparting fragrance, I have devised the following as a bottle-fastening: Referring to the drawings, I use a metal tip having a downward-projecting tube, *b*, passing through a cork, *C*, which is to be received in a suitable

glass bottle for containing any volatile liquid. Such an apparatus is seen represented in Fig. 1, where *C* is the cork, *B* the neck, and *B'* the cap of the fastening. This cap is made flat on the top, the plug part having a screw cut on its sides and a cavity in its lower end, to receive a cork projecting externally, for purpose to be stated below.

The tube *B*, which in its lower portion projects down through the cork, in its middle portion expands out into a cap-plate covering said cork, and the upper portion has its bore reamed out to a depth equal to the length of the shaft of the screw-plug, and a screw-thread is cut on its sides of the same size as those found on the screw-plug *A*. The reaming out of the upper portion of the tube *B* as far down as the line *a a* leaves an offset on shoulder in the bore of the tube, designed to be used as a valve-seat, against which the bottom of plug *A* shall rest when screwed home. Besides this, the upper extremity of tube *B* is turned down into a horizontal plane, as seen in Fig. 4, *g''*, constituting a flange, between which and the lower face of the cap *B'* is interposed a valve-piece or washer, *g'*, so arranged and operated that when the cork piece *v* is pressed against the shoulders at the lower end of the screw-thread in the valve *B* the valve *g* is pressed against the under surface of the cap *B'*, and secures a certain and permanent joint. Although I have in some instances dispensed with the valve *g* and flange *g'* on the ground that the lower valve is sufficient of itself, it is safer to use the upper in combination with the lower, and thus secure a safe and permanent fastening.

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

The rectangular-recessed valve-seat *c c* in the bottom of the screw-threaded cavity, in combination with flange-plate *g''*, also used as a valve-seat, substantially as described.

GEORGE W. ROGERS.

Witnesses:

CHARLES F. ROGERS,  
THEO. P. CALKIN.