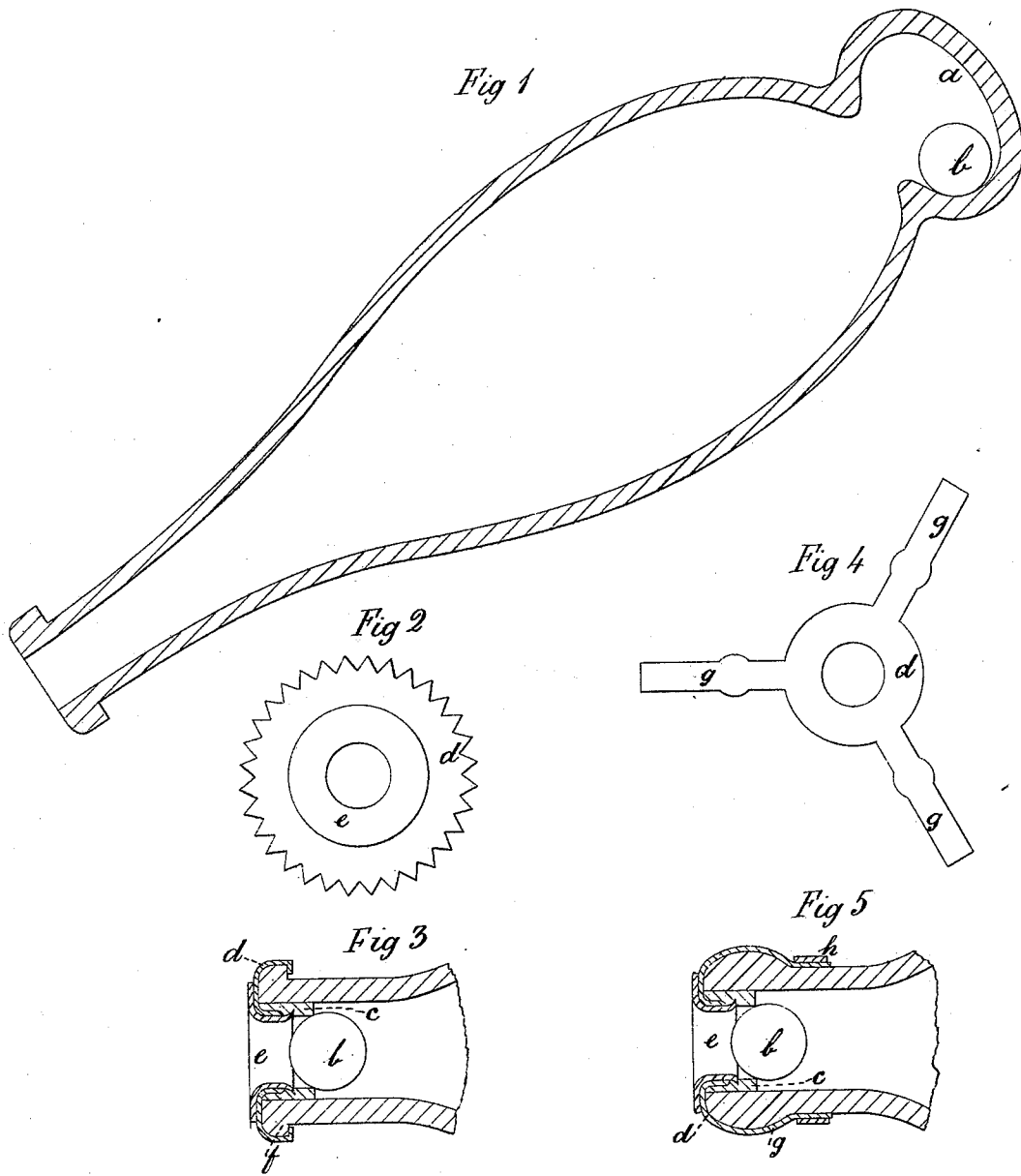


J. EDWARDS.

CAPS FOR AERATED LIQUID BOTTLES.

No. 175,952.

Patented April 11, 1876.



Witnesses

W. A. Barlow
D. Reid.

Inventor

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UNITED STATES PATENT OFFICE.

JOHN EDWARDS, OF HULL, ASSIGNOR TO HENRY THORNTON WILLIAMSON
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IMPROVEMENT IN CAPS FOR AERATED-LIQUID BOTTLES.

Specification forming part of Letters Patent No. **175,952**, dated April 11, 1876; application filed
April 19, 1875.

To all whom it may concern:

Be it known that I, JOHN EDWARDS, of Hull, in the county of York, England, professor of music, have invented an Improved Bottle and Cap for Aerated Liquids, of which the following is a specification:

This invention relates to bottles and caps for containing aerated beverages to be used with internal stoppers; and consists in forming the cap of a piece of india-rubber or gum tube, fitted into the neck of the bottle, such tube being held in position, preferably, by a brass retaining-piece, secured to the neck of the bottle by being bent over a fillet on the neck.

To prevent the aerated beverage from coming into contact with the brass retaining-piece, and also to more effectually secure the rubber, I make use of a block-tin or white-metal mouth-piece.

Figure 1 is a longitudinal section of a bottle constructed under my invention. *a*, recess or chamber for retaining the internal stopper *b* when pouring out the liquid.

Fig. 2 is a plan view, and Fig. 3 a section, showing my improved cap attached to the neck of a bottle. *c*, piece of india-rubber or gum tube kept in position by the brass retaining-piece *d*; *e*, block-tin mouth-piece. The brass retaining-piece *d* is held in position by

being bent over the fillet *f* on the neck of the bottle; *b*, internal stopper.

Fig. 4 is a plan view, and Fig. 5 a section, showing another cap under my invention. *c*, india-rubber or gum tube; *d*, brass retaining-piece, held in position by the arms *g* and band *h*; *e*, block-tin mouth-piece; *b*, internal stopper.

It will be obvious that if the number of arms were increased the band might be dispensed with. The stopper *b* is held against *c* by the internal pressure of the gases in the beverage, and so effectively seals the opening.

The retaining and mouth pieces may be made of one piece of white-metal or block-tin when the bottle or vessel is filled at a low pressure.

Having now described and illustrated the nature of my invention, I claim—

1. The combination of the tube *c*, pieces *d* and *e*, substantially as described.
2. The combination of the tube *c*, pieces *d* and *e*, arms *g*, and band *h*, substantially as described.

JOHN EDWARDS.

Witnesses:

W. A. BARLOW,
D. REID.