

R. BROWN, JR.  
BOTTLE STOPPER.  
APPLICATION FILED JAN. 10, 1908.

924,532.

Patented June 8, 1909.

Fig. 1.

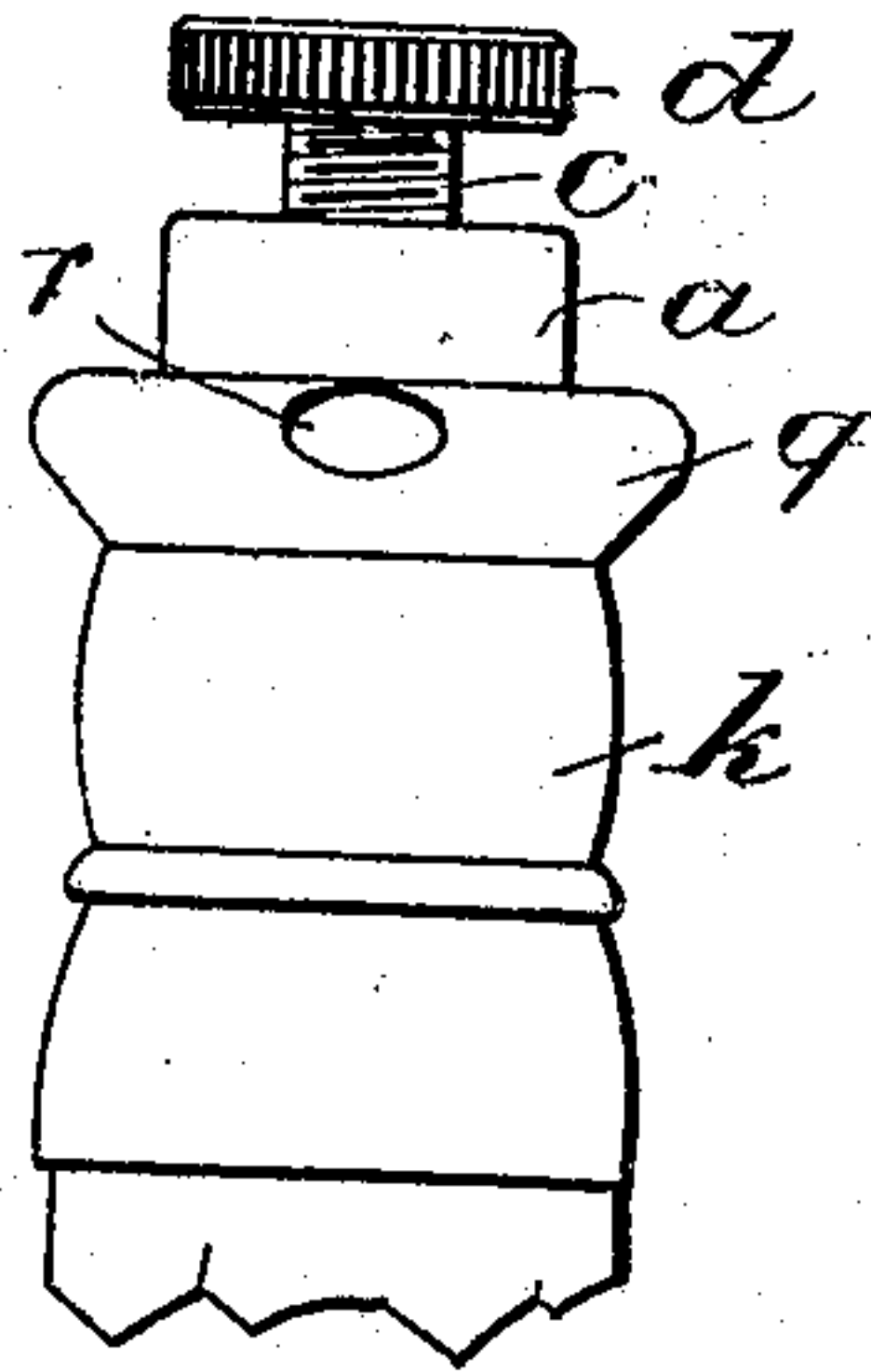


Fig. 4.

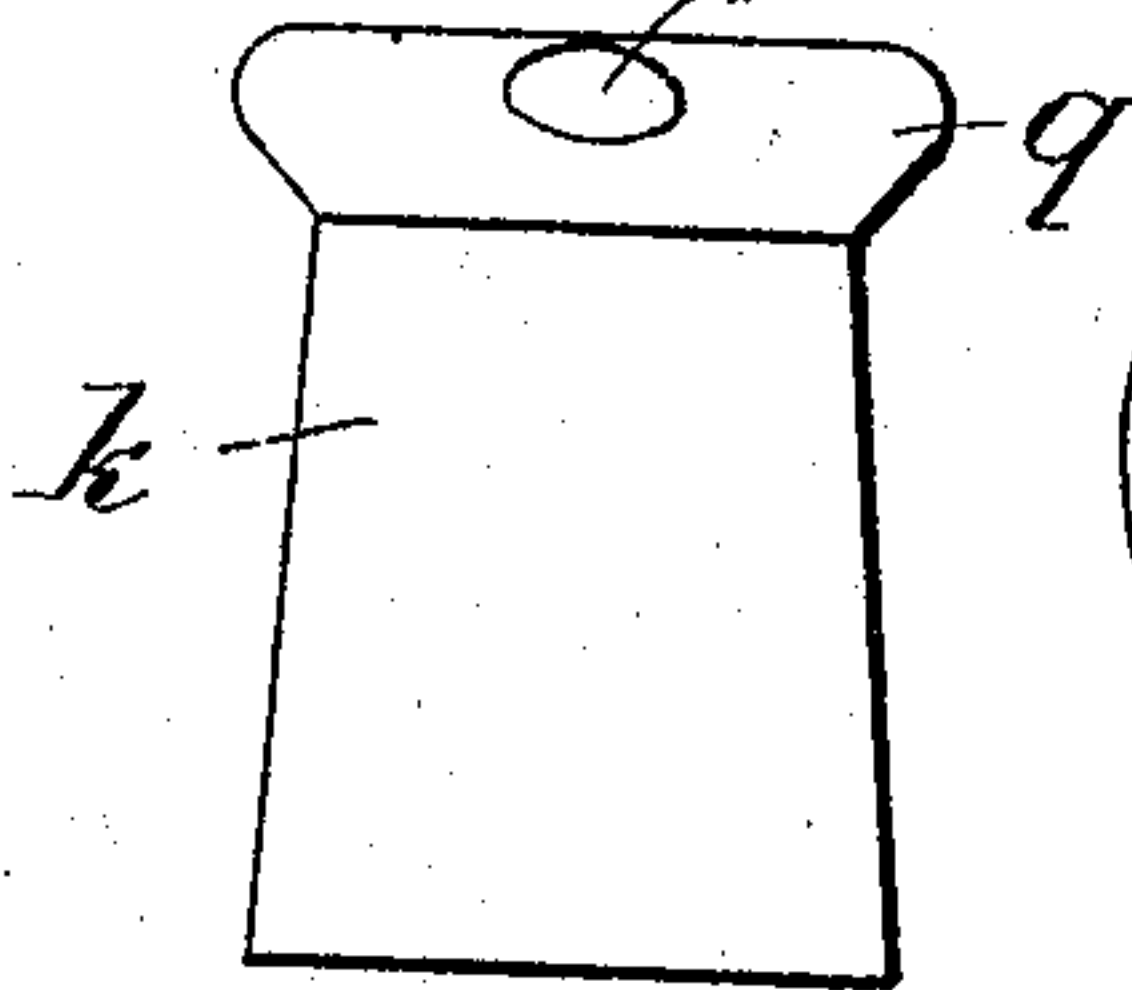


Fig. 2.

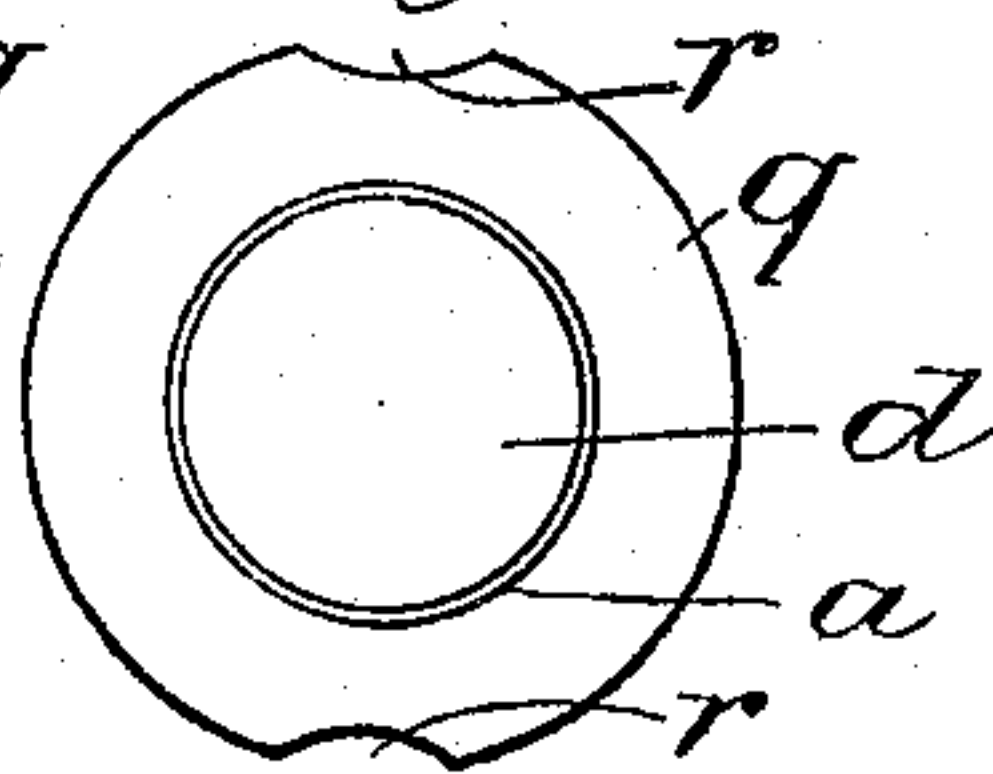


Fig. 5.

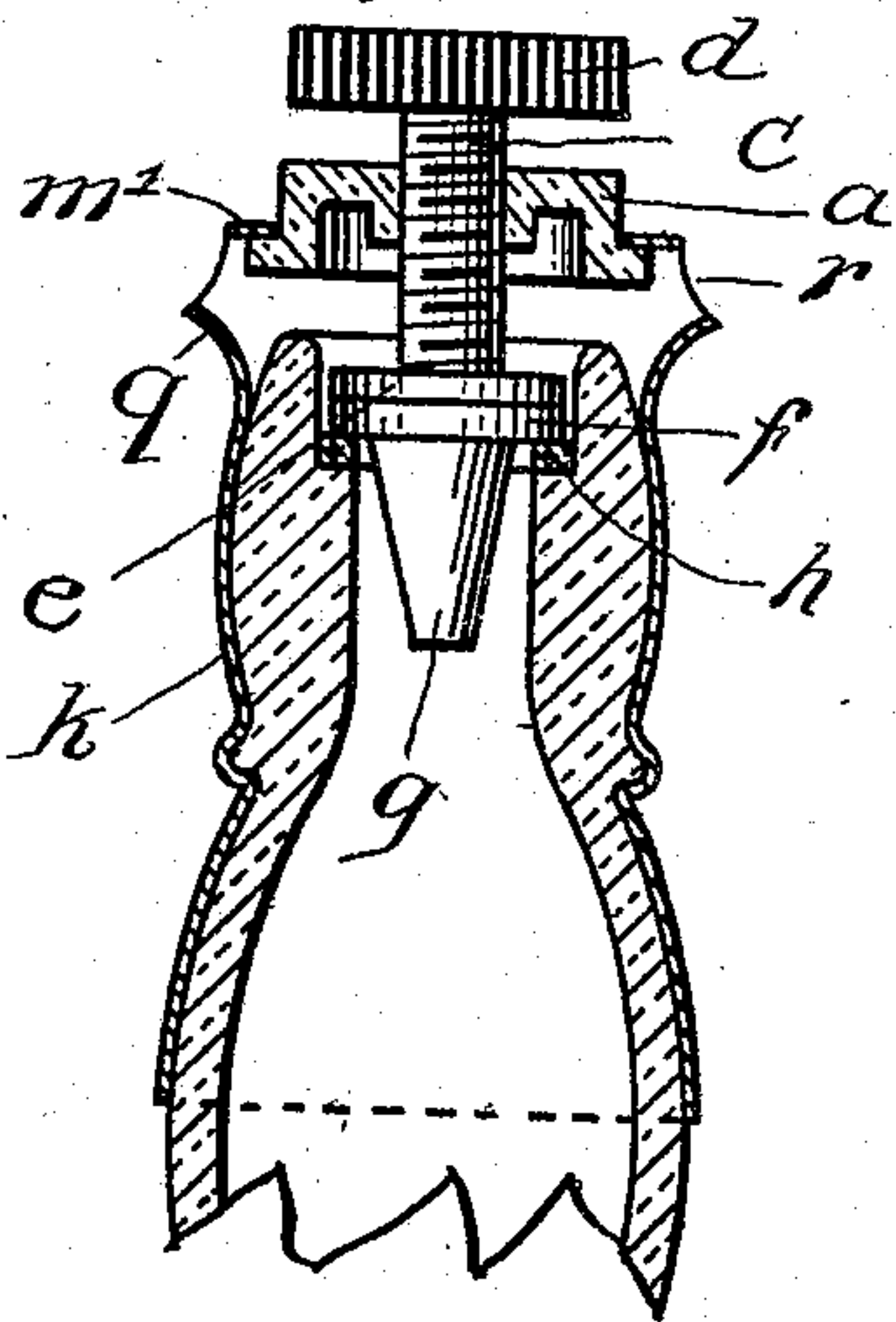
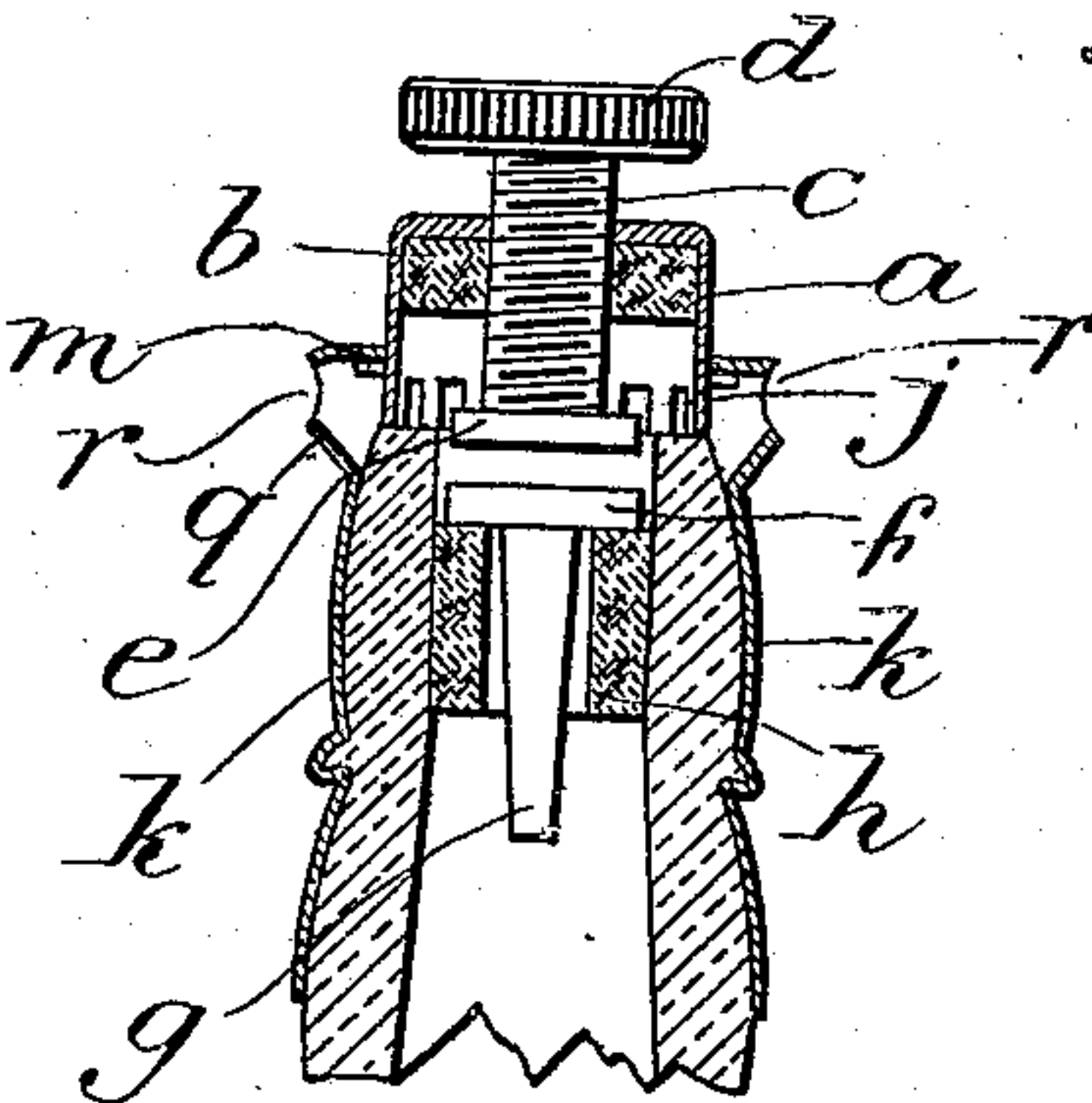


Fig. 3.



Witnesses.

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# UNITED STATES PATENT OFFICE.

ROBERT BROWN, JR., OF ILFORD, ENGLAND, ASSIGNOR TO N. R. CAPSULE SYNDICATE LIMITED, OF LONDON, ENGLAND.

## BOTTLE-STOPPER.

No. 924,532.

Specification of Letters Patent.

Patented June 8, 1909.

Application filed January 10, 1908. Serial No. 410,178.

*To all whom it may concern:*

Be it known that I, ROBERT BROWN, Jr., a subject of the King of Great Britain and Ireland, residing at Ilford, in the county of Essex, England, have invented Improvements in Bottle-Stoppers, of which the following is a specification.

This invention relates to a stoppering device for preventing a bottle being fraudulently refilled. Numerous suggestions have been made to achieve this object but the requirements of the trades in which such devices would be used are such that it has not been easy to meet them. In addition to the device being such as to practically prevent a bottle being refilled, it must be applicable to bottles having ordinary necks, must be cheap, and not involve the destruction of the bottle when emptied.

The stoppering device hereinafter described is so constructed that the more expensive parts can be used repeatedly, the only perishable part being the holding portion, which may be constructed of tin, tin alloy, soft metal, or other suitable material and forms a capsule which prevents the device being tampered with without the capsule being damaged and an indication of fraudulent manipulation thus given, and upon its removal for the purpose of enabling the bottle to be refilled at the distillery or the like place, can be melted, remade or otherwise dealt with without serious or prohibitive loss to the owner.

In order that my said invention may be understood I will proceed to describe the same with reference to the drawing accompanying this specification in which:—

Figure 1 is an elevation of the appliance as it would appear when fixed in position on a bottle; Fig. 2 shows a plan of same; Fig. 3 shows a vertical section of the appliance on the top of the neck of the bottle. Fig. 4 shows an elevation of the holding portion. Fig. 5 is a similar view to Fig. 3 of a modification.

Referring to Figs. 1 to 4, *a* is the part of the appliance which is of a more or less permanent character and which can be used for a number of bottles one after the other. This part *a* consists of a cylindrical cap of metal or other suitable material of approximately the diameter of the top of the neck of the bottle for which it is to be used. The cap *a* has a plug *b* of cork in the inside.

Through this plug and through the top of the cap *a* passes a screw *c* of metal, glass or the like. This screw *c* has at the top a milled-head *d* and at the lower end a disk *e* of suitable material which may or may not be rigidly attached to the lower end of said screw *c*. This washer or disk *e* rests on a stopper or valve *f*, provided with a stem *g*. This valve *f* rests on a cork ring *h* in the neck of the bottle.

The cap *a* is notched around its lower edge at *j* where it rests on the top of the neck of the bottle. In the spaces notched or cut out of the cap *a* a little of the metal is returned at *m* in a horizontal direction, so that the cap *a* is held in its place by a tubular capsule *k*. This capsule *k* which forms the second or temporary portion of the device is by preference of light tin or one of its alloys, such as "capsule metal". It is made as a sleeve open at the top and bottom, see Fig. 4, but the top part is constructed so as to fit over the cap *a*, being flared out at *q* and provided with two or more apertures *r*. This capsule or sleeve being brought down somewhat tightly on to the small returns *m* around the cap *a*, the latter is held firmly on the mouth of the bottle and the capsule *k* and cap *a* together constitute a covering device which protects the valve *f*. The capsule *k* or outer cover after being drawn down is pressed by hand or power machine so that it assumes the shape and conformation of the neck of the bottle and cannot be removed therefrom without destroying or distorting the said capsule sufficiently to enable a person to know that it has been removed from the bottle for the purpose of fraudulently refilling the same.

In some cases I may make the cap *a* of vulcanite, or other like material or composition.

In using the device when the bottle is filled the valve *f* is dropped into position in the cork ring *h*, the cap *a* is then put on to the top of the bottle. The capsule *k* is then dropped over the cap *a*, the top of the said capsule resting on the returns *m*. The capsule is then pressed into shape at the outer part of the bottle neck. When liquid is required to be poured out from the bottle the milled head *d* is turned so as to raise the disk or washer *e* by means of the screw *c* and when the bottle is tilted the valve *f* comes away from its seating allowing the liquid to pass around it, through the notches *j*, past the



cap *a* and through one or more of the apertures *r*.

The cap *a* in Fig. 5 can be made to snugly fit to flange *m'* in order to maintain said cap in a raised position when the valve retaining means is raised, or if desired the cap *a* can be loosely held within the flange *m'* in which event it will be forced into its raised position when pressure is applied to the valve.

I may employ in place of the return or bent-out portions of the metal *m* (Fig. 3) a ring or ledge on which the top part of the capsule rests. Such an arrangement is shown in Fig. 5, *m'* being the ring or ledge. In this example, the top of the cap *a* is thickened and used as a nut for the screw and is not filled with cork. The cap *a* need not rest on the top of the bottle neck but may terminate in the outward flange or ring at *m'*, as shown in Fig. 5.

What I claim is:—

1. The combination with a bottle of a seating therein below the mouth thereof, a valve adapted to become seated thereon, a holding portion adapted to be fixed tightly around the bottle neck and having suitable apertures for the escape of liquid and entrance of

air respectively, a cap adapted to fit within and be engaged by the upper end of the holding portion and externally operated means carried by the cap for retaining the valve upon its seating.

2. The combination with a bottle of a seating therein below the mouth thereof, a valve adapted to become seated thereon a holding portion adapted to be fixed tightly around the bottle neck and having apertures for the escape of liquid and entrance of air respectively a cap adapted to fit within the upper end of the holding portion and having an external projection adapted to engage with the inner surface of the top of the holding portion, a screw passing through a tapped hole in the cap having a milled head at its upper end and a plate at its lower end to prevent withdrawal of the screw.

Signed at 14 Jewry street in the city of London England this twenty-fourth day of December 1907.

ROBERT BROWN, JR.

Witnesses:

S. A. ABBOTT,  
ARTHUR WOOSNAM.